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COLMAN'S

H. NACKEN, ST. LOUIS.

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Sorgo Department.

The Rural World is the only journal in the United States having a special department devoted to syrup and sugar making from sorgo.

Cane Seed Failures.

There is a mystery in connection with the failure of cane seed to germinate this season that baffles all my experience. I have found this failure to be quite general, and apply to the seed of some of our oldest producers. It has resulted in much loss and disappointment. My purpose has always been to get the best seed possible to be had, and until this season have had no complaint. I find by tracing after causes that the seed that has been handled in the usual manner; that is, gathered from the field after cane harvest and stored away in the tuft in the loft or covered pen, and threshed in the spring or late in the winter, such seed has generally failed to germinate more than a 1/2 to 1/3 stand—notwithstanding the seed was perfectly bright and free of must or other evidences of heat. In former times, and until it had become a seeming waste of time and money, I applied a test by sprouting and so advised in my writings; but long experience of judging from observation of appearance and the almost unknown failure, led me, as well as many others, unfortunately, to forego the test. This will not do. It has cost me much money and the country largely more. I am pleased to know that most of my distributions of such seed have been in small lots, which do not bear so heavily. I learn of others, whose sales were large and consequently more serious. It is my purpose to continue to refund to those I sold seed, either in good seed, sugar makers' supplies, books or cash, where such articles are not needed. It is well understood that I do not grow the seed and am therefore an innocent party.

This season's experience will teach us a lesson in this seed business that should shield us from a future like occurrence. I attribute it to the extra ordinary winter. Indian corn has suffered in like manner. I. A. HEDGES.

Isaac A. Hedges' Tour—Continued.

Bavaria is my next stop, A. A. Denton's place is near. He has a crop much of which is exposed to that common enemy—chinch bug. This gives him great uneasiness. He has ordered a larger mill than his crop will justify at present showing, and then he is likely to be too late in getting ready. This hot, dry weather is sure to hurry up his cane, while all his dependencies are likely to fall behind time. I have fears for friend Denton's outcome.

Next stop, July Fourth, is Ellsworth, a flourishing little city in a rich country of land. A stock company is formed here and contracted for a five-foot mill, costing some \$6,500, with boiling apparatus \$2,500 more, all to be on the ground by September 1st, about one month too late to meet their necessities. The energy and active spirit of the citizens in this little city has allowed some of them to take chances in the "elephant raffle," and I fear they will come out like our friends of Larned last year. There are several causes leading to these premature efforts or rather efforts in excess of the conditions to insure success. First, the great need of a paying, certain crop, to take the place of wheat. Second, an active town interest to concentrate business to its local growth. Third, this is taken advantage of by manufacturers' drummers whose interest is to induce the construction of the largest works possible as it counts more dollars.

If soliciting agents consider the best interests of the industry and all concerned, they will caution against overdoing lest failure shall follow and a severe setback be given. I advise in all such large undertakings the necessity of having a thoroughly competent and experienced man on hand to take charge of and carry to completion, such enterprises. This seems to be lacking in most of these movements. This I have anticipated as those who have read my many warnings know, and I will here repeat that this difficulty will be magnified annually unless checked by the results of some stupendous failures. This company deserves success.

From Ellsworth I took overland passage with mine host of the "Cottage Hotel" in his carriage to Lyons, county seat of Rice county, and thence in hack to the thriving town of Sterling, on the Atchison, Topeka & Santa Fe railroad. This vicinity is more alive to the sugar interest than any place of its numbers in the State. There are two works going up here, either of which would be enough for a year or two until they shall have a well drilled force both in the field and factory. They are not aware of the magnitude of the undertaking and are therefore liable to be mistaken. There have been considerable failures of seed here and second planting just coming up. This may do well or totally fail should a drouth continue. This cane will stand drouth well after once well rooted, we know, but I greatly doubt its capacity of doing so when the roots are not yet formed. This will afford us a new chapter in this industry and determine how late we may plant. The fact that rattoons will shoot up late and mature, is not evidence that the young plant will do so. The deep roots in the moist earth will sustain the ratoon while the young plants will fail in the drouth. From this place, after a short stop, I next dropped off at Dundee Station, where works are being put up by direction of J. B. Thoms, for Messrs. Brinkman & Co., of Great Bend, some eight or nine miles from the mill. This is being arranged for a thorough works. Mill roll 30 inches by 3 feet, everything very strong, especially when we compare the size of engine and the power of the back gear, which I find to be 25 per cent less than Niles mills of less size and much less length of roll. If each mill has same motion of the roll, the engine will run 25 per cent less power upon the mill, and hence that much less liability to break, and exert that much less force upon the cane. Mr. Thoms has given evidence of his skill in planning this works, which is designed for a refinery as well as plantation sugar works. More of their machinery is on the ground, and large building, mostly stone, nearly complete. He was not there I regret to say, as I wished to meet him on the ground to get items. One thing is evident, Boss Thoms means business. Messrs. Brinkman & Co., have a field of over 700 acres of good cane and planting or replanting yet (July 6th), as they have also suffered from bad seed obtained from different parties, thus showing how extended this misfortune is.

MANHATTAN, Kan.—After ten miles ride in the country, I find our old friend B. F. Griffin, who has some fifteen acres of good stand Early Amber cane and a failure of as much more, because of the mysterious fault in the seed, although apparently of superior quality. This faulty seed is not confined to any one variety or one man's production, or dealer's trade. There are more than 1,000 acres in Kansas that have failed from this cause. This calls aloud for some more certain method of saving seed. The seed from the best old growers, such as C. M. Schwarz and R. R. Scott of Illinois, have been alike failures. There is failure of ripe seed without heating in any manner. But so far as I can learn, seed that has been kept over winter in the tuft, even in a dry barn, has lost its germinating power. Other years, it has not done so. Is it our terrible hard winter that has done it? Mr. Griffin suffered last year from an inefficient mill, which was largely advertised as of great strength and capacity, of which it failed in both cases. In his effort to obtain the required juice, his mill broke, and with the repair came a bill for the part to make good a warranted mill. He strengthened the weak plates, and then his roll burst; then with another roll, came another bill.

Now this is all wrong, and our sorgo friends cannot go about setting these matters right too soon. Let a few cases be put through a legal process of settlement, and then manufacturers will not only send repairs free, but be careful about blowing their mills above their real merits. Any mechanic of skill that will examine that broken roll will see the want of knowledge of the true principles required for constructing such machinery. In all those new movements, much confusion and loss must ensue.

My next stop is with one of Kansas' most useful men, Dr. T. V. Roudiez, who has left good positions as a scientific teacher and also a large practice as a physician, to give his attention and rare skill acquired in a long service in the French army and also in the direction of the operations of a surgical school in France. The Dr. has a fine farm 2 1/2 miles north of Hazleton station, on the Kansas Pacific railroad, in

Dickenson county. His skill in farming is revealed in his good crops. He has of his own planting some 30 acres of splendid cane nearly shoulder high, also some 30 acres of his neighbors. He has Early Orange, Kansas Orange and Early Amber from seed that I had furnished. I look for good results from Dickenson county. The Dr. intends to make cane culture and sugar making a specialty, and I will add that this is the intention of most of those I meet. Look out for a sugar boom in Kansas ere long. The uncertainty of wheat and the certainty of chinch bugs is the "finger board" pointing to sorgo sugar. I must relate here the Dr.'s method or rather the method employed in the French army to determine where to dig for water. I expressed my surprise at his obtaining such good water so near the surface on the high table where he lives. Why, sir, said he, I knew just how deep and free supply I could get before I began digging. I said, how so, Dr.? Well sir, the strong affinity between quick silver and water is the means and was practiced by the sappers and miners in our army in the civil war. Having occasion to locate a hospital, water was essential. The master of that department prepared for search. He put a quantity of quicksilver into a horn, ordinary powder horn, set it point upwards, some inches below the surface of the ground, in fresh, moist soil surrounding it, then inserting the small end of another into the one imbedded having the bottom (or now the top) open, he applied his ear to it as a telephone, he says the length of time at which rippling waters will be heard will indicate the depth and the distinctness will denote the abundance. In his case the report was feeble in some 20 minutes, he waited longer and a rushing report was heard. They found water in 20 feet, dug ten more and it came rushing of ample supply, and rose fifteen feet, and there remains. I thanked the Dr., and said the telephone had prepared me to believe almost anything I could hear. I trust we shall have many good things from the Dr., as a gentleman of his thoroughness of study and large experience becomes a library of useful knowledge.

I. A. HEDGES.

Inquiries Answered.

Mr. I. A. Hedges, I have just returned from an extended trip in Kansas and found your letter awaiting me. I have made arrangements to set up my factory in Rice county, Kansas, and will ship it immediately. I am very much pleased with that country and am calculating in the future to put up quite extensive works in that State. What do you think of Kansas for syrup producing? At what price do you think you can sell such syrup as Bogarth made at Cedar Falls last year?

ANAMOSA, IOWA. E. BLAKELEE.
REPLY, by Mr. Hedges.—Kansas will take the lead in this industry. Her soil and climate as well as people, are suited for it. True they are subject to severe climatic extremes, but as yet sorgo has done well, and as her pushing people study the habits of this crop and learn the best varieties and modes of culture, success will be assured. That Arkansas valley is a grand garden, with a river laying so high as to be very cheaply spread out in channels for irrigation if needed, we are all satisfied, but if cane is planted in the fall it will make a sure and early crop. About the price of Bogarth's syrup, or such as it, I can get 45 cents per gallon by car load, at present outlook. I omitted to assign one other favorable condition in Kansas, which is the far-seeing and liberal policy of her railroad managers in offering facilities to these bold, self-sacrificing pioneers, who are opening the way to the future success of this undertaking.

Our Future Supply of Sugar.

Some of the best informed sugar experts of this country have estimated that the consumption of this staple within the limits of our vast country will this year reach the enormous amount of 1,225,000 tons.

Of this quantity our own state will furnish probably 125,000 tons. The various beet, watermelon, sweet potato and glucose or corn sugar manufacturers of the country, together with the northern and eastern crop of maple sugar, will aggregate at least 200,000 tons, leaving a deficit of 900,000 tons, which must be provided for by the importation of the precious staple from foreign countries, principally from Cuba, Manila, and the Sandwich Islands. The sugar of this latter country is all consumed on the Pacific slope.

The manufacture of the sugar from watermelons and sweet potatoes is still in its infancy. Yet the enterprising farmers of the northwest and the Pacific coast are very enthusiastic over the new industry, while this year thousands of acres of rich land which have hitherto been devoted to the cultivation of other crops have been planted with the two vegetables, and machinery for the extraction of their saccharine properties is in great demand. The manufacture of glucose or corn sugar is increasing to a marvelous extent. In 1880 one New York firm alone

made, it has been asserted, some 20,000 tons. This glucose enters into the manufacture of all articles of which sugar is an ingredient, while so much of it is utilized that it has attracted the attention of the government as a fit subject for taxation.

Although our own favored state possesses an area of territory amply sufficient for the supply of the remaining 900,000 tons of sugar, we will be compelled to import this year, several unfavorable circumstances inexorably militating against the consummation of such a happy desideratum; among which we may justly place the unfortunate levee system that at present obtains in the sugar regions that lie along the banks of the great river and the numerous bayous and creeks that reticulate our state.

This vast deficit of 900,000 tons of cane sugar must then be supplied from foreign importation. But Cuba, from whence a moiety of this supply will come, cannot much longer be reckoned upon, for the labor system in that unfortunate island is daily becoming more complicated, while the export duties and other unjust restrictions placed by the government on this great industry have become so onerous that last year the cultivation of many plantations was temporarily abandoned.

The time, therefore, is fast approaching when we must look to other countries for our supply of this precious staple nor will we have to look far. The rich fields of Morelos, the vast plains of Michoacan, and the tropic valleys of San Luis Potosi will soon furnish an inexhaustible supply; but this sugar will not reach the Crescent City refineries, for the railroads now in course of construction in our sister republic will, through their American connections, flank New Orleans, and will deposit their rich freight in the warehouses of St. Louis, of Chicago and of Cincinnati.

But the diverting of this sugar traffic from New Orleans will not militate against the prosperity of her refineries. A new and as great a field of enterprise is open to her merchants and manufacturers. The eastern coasts of Mexico, Central America, and the northern coast of South America, as well as the western islands of the Antilles, will pour the rich tribute of their fertile fields into the heart of our beloved city, and will furnish a moiety of the sugar needed by our fifty odd millions of population, while there is nothing to prevent the establishment of a sufficient number of sugar refineries in New Orleans to supply the wants of the entire section. This field of enterprise is open to the efforts of our merchants and refiners. Will they occupy it, or will their energetic rivals of Boston, New York and Philadelphia snatch it from them while they are calculating the risks and profits?—N. O. Democrat.

The writer of the above may be very well posted about some of the statistics of the sugar industry, but he is deplorably ignorant of others. The idea of giving prominence to sweet potatoes and watermelons for sugar manufacture, and to ignore entirely sorgo is ridiculous. The writer is either ignorant of the large planting of sorgo or so prejudiced against it as not to give it the position it deserves. We are aware there is a prejudice in the south toward sorgo, but there should be none. We should work hand in hand and side by side with our southern sugar planters. As long as our country is a large importer of sugar, if the northern planters can aid in furnishing the needed supply, they should have the support and sympathy of the sugar workers of the south. Some of the more prejudiced writers in the South may think they can snub and ignore sorgo growers, but they will find their mistake. They will learn that sorgo will produce a thousand times more sugar and syrup than sweet potatoes and watermelons combined. We will show them sugar this year from sorgo not inferior to that from the ribbon cane.

Domestic Sweets.

COL. COLMAN: The sorgo plant is pre-eminently the source of our domestic sweets. It alone has the widespread adaptability which renders its supplies inexhaustible. Yet monopolies cannot grasp true cane sugar with sufficient ease to satisfy their greed. As we have no security that the refined product in their hands will become pure lake water, the sorgo mill becomes our surety for wholesome sweets as the cow is for milk, sweet cream and fresh butter. So determine the size of your mill at once. This becomes a local question. If the local demand is great, the mill should be great. As a rule, syrup will not bear a cost of transportation greater than the difference in large output. Having determined the size of your mill we do not wish to lessen it, but insist upon the enlargement of pans. For each square foot of pan calculate one quart of syrup per hour. The capacity of your pan should be greater than that of the mill. Juice

pressed out in the cool of the morning in fresh cool tanks requires more time than the after juice heated by the sun and furnace. The fire requires less urging later in the day, &c. As well get a cow large enough to keep the churn going as to size your pan with the mill. Bagasse, burning, urges this consideration. Strange as it may appear, a number of operators will burn wood and coal yet another year. Mr. William Wright, of Nebraska, melted a \$20 set of grates in his bagasse furnace last season—lack of ventilation.

O. H. HAWK.

White Water, Kan. July 13th.

Cane in Texas.

COL. COLMAN: Reading the letter from your Dallas county correspondent, reminds me that I planted three varieties of sorgo on the 18th of March last—Early Amber and a variety known here as Silver Drip, together with the large, late variety called Broom Corn cane. We celebrated the 4th of July by working up the Amber patch. The Silver Drip will be ready ten days later, and the late variety perhaps by the latter part of August. As it is everybody's time to speak, I offer the following as my experience:

Plant cane as early as corn if not earlier. It stood our last spring's frost better than corn. You can scatter your work by using different varieties. Another advantage is that in the south we can work off the crop before cotton picking commences—I mean, manufacture the syrup before the cotton picking season, as this absorbs all the labor of the country. There is not so much difference in the different varieties of cane as is generally supposed. The proper manipulation is the difficulty.

A change of subjects is out of taste I know, but when I feel that it is necessary to say a thing, however unpleasant, I must say it. Texas is on a boom and a big one. Railroad iron and immigrants are pouring over our borders at an unprecedented rate. And I have introduced this subject, simply to say to some of your well-to-do northern farmers, that this boom will land some of them high and dry on the staked plains of western Texas, to be seen the following year, wending their way homeward on an ox car, bearing the conviction if not the inscription, "we're busted." The agriculturist who comes to Texas must settle in the central, northern or eastern part. The west must remain a herding ground forever. So look before you leap, and be sure you are not deceived when you look. Caddo Grove, Texas, July 8. M. C.

About Sugar.

We take the following from the United States Economist:

The table of the values of imports into the United States for the year 1880, gives the extraordinary large sum of \$78,852,117, as having been expended by this country in the purchase of foreign sugars. With those who have not given particular attention to the subjects of sugar raising and sugar importation, the idea has largely prevailed that the United States produced quite sufficient sugar for its home consumption, and the knowledge that their is taken annually out of the country a sum of such magnitude for the purchase of this largely used article will, it is hoped, direct public attention more directly to this subject, and finally secure the adoption of such means as will perfectly develop and stimulate the home manufacture of sugar. The three great sugar producing states, before the war, were Louisiana, Texas and Florida. Their combined production for the year 1861-2 was unprecedentedly large and was estimated at 191,000 tons, or 427,840,000 pounds.

In 1865, however, this branch of industry had become nearly extinct; it was estimated that no more than 500 tons of domestic cane sugar entered into the total sugar consumption of the country. Last year the home production of sugar from the tropical cane was about 250,000,000 pounds, while our importations are placed at 1,741,650,000 pounds, and these figures, it must be understood, do not include the molasses, melado and other forms of sucrose. In Europe the manufacture of sugar from the sugar beet has been successfully accomplished, both Belgium and France producing more than one half of the home consumption. Though long before suggested and tried in Germany, the beet sugar manufacture is purely French in its economical origin. The Continental system of the first Napoleon raised colonial produce to a fabulous price. At six francs per pound colonial sugar was within the reach of few.

The high price led many to cast about for means of producing sugar at home, and a great stimulus was given to this research by the magnificent premium of 1,000,000 francs offered by the Emperor to the successful discoverer of a permanent source of supply from plants of native growth. Of the many plants tried the beet proved the most promising; but it required twenty years of struggles and failures to place the new industry on an independent basis. Twenty years more enabled it to com-

pete successfully with colonial sugar, and to pay an equal tax into French exchequer. To-day the total produce of this kind of sugar on the continent of Europe, has reached the enormous quantity of 500,000,000 pounds, of which France produces about one-half in her four hundred manufactories. In this country the attempt to make sugar from beets has not yet proved successful. In Illinois, Wisconsin and California the manufacture has not proved profitable, and has been largely abandoned. Experiments, however, have been made with sorghum, yielding the most satisfactory results, and from this point it is hoped to obtain the production of this valuable article. The Government should endeavor to facilitate and help forward all reasonable enterprises having in view the successful development of sugar production, and so keep within our own coasts the immense sums we now expend abroad for this necessary article.

There is no reason why sorghum cannot be worked in conjunction with sugar cane in Louisiana to give more employment to machinery. The same mill and apparatus can be used without any change, so that the experiment will be inexpensive. Where it has been grown at the south for fodder it springs up as fast as cut, the stubble continuing to grow until the appearance of frost—Sugar Bowl.

Agricultural.

Clover as a Fertilizer.

All plants draw much of their food from the atmosphere, and of those used in agriculture none are exceeded by clover in the large proportion of nutriment thus derived. In this respect other leguminous crops are much like red clover. Here we include all the clovers, vetches, beans, peas, sainfoin, lupins, and lucerne.

To keep up the fertility of our soil, we must restore to it phosphoric acid, potash, nitrogen and other substances which are found in farm crops. Of the three very important and valuable substances just named, nitrogen is the most precious and costly to obtain. In various places there are abundant supplies of potash and phosphoric acid. As may be said, these are "in sight." Agricultural chemists are now studying on the problem of the future supply of nitrogen for agricultural purposes. So far, clover seems to be the important factor in this problem.

Whole crops of clover are often plowed under to restore or keep up the fertility of the soil, but I am safe in saying that it has been proven a better practice to cut off the clover, feed it and use the manure, than to plow under the whole crop. In other words, for various reasons, all of which may not seem plain, it has been shown that plowing under a clover stubble is followed by about as good results (often better) as though the whole crop was turned under. Again, Voecker shows that "land on which clover has been grown for seed in the preceding year yields a better crop of wheat than it does when the clover is mown twice for hay, or even once only, and afterwards fed off by sheep."

Says Dr. Voecker in the Journal of the Royal Agricultural Society of England:

"1. A good crop of clover removes from the soil more potash, phosphoric acid, lime and other mineral matters, which enter into the composition of the ashes of our cultivated crops, than any other crop usually grown in this country."

"2. There is fully three times as much nitrogen in a crop of clover as in the average produce of the grain and straw of wheat per acre."

"3. Clover is an excellent preparatory crop for wheat."

"4. During the growth of clover, a large amount of nitrogenous matter accumulates in the soil."

"5. This accumulation, which is greatest in the surface soil, is due to decaying leaves dropped during the growth of clover, and to an abundance of roots, containing, when dry, from one-and-a-half to two per cent. of nitrogen."

"6. The clover roots are stronger and more numerous, and more leaves fall on the ground when clover is grown for seed than when it is mown for hay; in consequence, more nitrogen is left after clover seed than after hay."

"7. This crop causes a large accumulation of nitrogenous matters, which are gradually changed in the soil to nitrates."

"8. Clover not only provides abundance of nitrogenous food, but delivers this food in a readily available form (as nitrates) more gradually and continuously, and with more certainty of a good result, than such food be applied to the land in the shape of nitrogenous spring top dressings."—Prof. W. J. Beal in Clover Leaf.

The Whitman Agricultural Co. are building a new factory which is 255 feet long, 45 feet wide, three stories high and basement, with two cells. Also blacksmith shop 75 by 35 feet, and fire-proof pattern building 40 by 20 feet, two stories high, with all modern improvements.

The Grange.

[The Rural World welcomes to the Grange Department communications from Missouri and all parts of the Mississippi Valley from members of the order. Brief notes of what is going on in the order, or any matters pertaining to it will be cheerfully published.]

Official Grange Paper.

At a meeting of the executive committee of the Missouri State Grange, held in the city of St. Louis on the 3d day of December, 1880—all the members being present—it was agreed to accept the proposition, submitted by Col. Norman J. Colman, for publishing the official grange communications in the RURAL WORLD during the two ensuing years.

A. M. COFFET,
Secretary of Executive Committee.

Knob Noster, Mo., December 6, 1880.

Rolla State Grange Resolutions.

The Missouri State Grange, at its late session at Rolla, unanimously adopted the following:

Whereas, COLMAN'S RURAL WORLD was one of the first papers in Missouri to espouse the grange cause, and to urge the farmers of the State to organize themselves into granges; and

Whereas, It has ever been the faithful, earnest and consistent friend of the grange and of the agricultural classes of the State, zealously laboring to advance every agricultural interest and to elevate the profession of agriculture to a higher standard; therefore, be it

Resolved, That the Missouri State Grange cordially indorses COLMAN'S RURAL WORLD and recommends it to the support of the Patrons of Husbandry of the State of Missouri.

There will be held a regular meeting of the St. Louis County Grange at Meramec on the first Wednesday of August at 10 a. m. Business of importance will come before the meeting.

Examples of Watered Stock.

A little less than three years ago—in September 1878—the entire issue of Louisville and Nashville stock was worth, at current prices, \$5,041,100; a day or two ago, also at current prices, it would have taken \$9,196,000, and this after a stock dividend of 100 per cent. Rock Island, one of the steadiest of stocks, could have been bought up entire for \$59,375,000 in 1878; now it would take \$80,742,000 to buy the outstanding stock; New Jersey Central, at the same time, 1878,—and it was not then at its lowest point,—would have cost \$6,778,500; to-day with a heavier debt before it and very little increase in property, \$18,050,000 would be needed to buy it. Similar instances might be given without number, but these must suffice now. It will take some pretty close thinking to find out where all the difference comes in.—New York Graphic.

Monopolies.

On this subject much is said that is mere bosh. There is no such thing as building railroads of any considerable magnitude, except by a combination of capital, or by government.

For years I have advocated national control, either by law or by building one or more through lines from the seaboard to such point west as may be necessary to secure command of freights. Wallace, of the Chronicle, has the following on the subject. In speaking of J. F. Wilson he says:

The ablest contribution to the subject that we have met is the speech of James F. Wilson at the canal convention in Davenport. He shows very clearly that when pooling is possible competition brings rates at terminal points too low, either one or the other road must go into bankruptcy, or the loss must be made up by extortion from non-competing points; that the building of more roads than are necessary to any point in the vain hope of competition impoverishes both the country and the railroads.

He emphasized forcibly the power both of State and National control, and looks to these for the ultimate solution of the problem, in connection with the establishment of routes of water transportation.

It is worthy of special notice that this man who has been maligned as the friend of monopolies and who is now a candidate for U. S. Senator, should take the highest ground yet taken by any man in the United States in favor of government control. And we submit that it is the only true and safe ground. The right to control is in the general government by express constitutional provision.—Newton Journal.

The Grange.

We hear from many sources great surprise expressed at the rapid growth of public sentiment in favor of an equality of rights, and particularly in regard to the fact that progress seems more rapid in the agricultural districts than in the larger towns and cities, and we are requested to suggest a reason. We think the answer may be embodied in two words—the grange.

Silently and unobtrusively there is developing in our country an organization destined in the near future to effect results, startling in their character to the careless observer. The fact that during the past nine years the thoughtful men and women from our farm homes have convened together on an exact equality to consult upon questions pertaining to the better methods of government in the school and State, may not have attracted general attention, but influences have been set on motion, incalculable in their results, and, as we believe, incalculable for good.

A list of the topics to be discussed during the year, at meetings where men and women meet as human beings mutually interested in all that pertains to life and living, includes the following: Some advantages of a governmental system of savings banks, arbitration the true principle for individuals and nations, compulsory education, how farmers may make the most of life, home part of education, limitation

of ownership in land, experience and reviews.

We know of no better form of clubs or no association that suggests such possibilities of usefulness as the Grange, and our earnest hope, is that the earnest women of rich and varied experience, to-day living in our farm homes, may appreciate and use this organization and render it strong and pure.

Railroad Freights on Produce.

The subject of railroad transportation is becoming one of great importance to farmers. The exorbitant rates charged for short distances is especially burdensome to producers, and it behooves those interested to adopt measures to prevent further injustice and extortion. The new principle, now boldly advocated and largely adopted by railroad corporations, to charge "what the traffic will bear," instead of basing the charges for carriage on the "cost of the service," is most unjust and fair placing the rural producers of the country at the mercy of grasping monopolists. Unless this injustice is speedily checked, and that effectually, our farmers will ere long become vassals, and be compelled to give most of their profits as tribute to railway companies, instead of gradually increasing in wealth and independence as should all honest and industrious producers.

The farmers of this country are numerically the strongest of all the industrial classes and should exert a controlling influence upon all legislation affecting their pecuniary interests. Yet the facts are that both the State and National laws which most directly affect the rights and interests of the rural population are enacted by lawyers, bankers, merchants and manufacturers. The reason of this is very obvious. It is because the farmers are not properly represented in our legislative bodies. In most instances, instead of selecting law-makers from their own class or occupation, they seem to prefer lawyers or other professionals, and the consequence is that, however strong may be the pledges of fealty to producers before election, the representatives chosen are wont to be found on the side of the corporation monopolists when the time for legislative action arrives.

The true remedy for the growing evil and injustice is for the agriculturists to assert and insist upon the maintenance of their rights. They should take decided action, regardless of party affiliations or consideration. A voice in the United States Senate, a few days before its last adjournment, truly said, "That the demands of the farmers are just and proper must be apparent, and that they will be complied with as just as certain as that the Government shall endure and the farmers of the country continue to appreciate the justice of their claims and their undoubted power to enforce them." The great body of industrial citizens and producers thus referred to should appreciate their power and organize to enforce their claims and defeat the machinations of monopolists. And if they were properly represented by true men in our State and National legislatures this could be comparatively easy of accomplishment. For example, if the farmers had an equal representation in Congress with the other industrial classes, they would have 146 members instead of only sixteen, or nine times the number they now have! And in many of our State legislatures the farmers are also greatly in the minority—far below what they are entitled to according to numerical strength, as well as wealth, intelligence and moral worth.

Surely it is high time that the ruralists of this land should come to the front and be properly represented in our legislative assemblies. But meantime—while lacking men of their own occupation as law-makers—they should take measures to influence legislation in the right direction. Individuals and through their organizations they should appeal to their representatives for protection and justice. In the matter of freight discrimination, for instance, they should inaugurate a movement demanding such legal regulations as will compel railway companies to fairly perform their duties to the producers of the country. The truth is that the encroachments of corporations are becoming unbearable, and must be checked, or the great producing class of the land will ere long be impoverished, thus destroying the very foundation of our National prosperity.—Ex.

The grange has its appointed work, and if every one will put a shoulder to the wheel, the Mecca lands of Faith, Hope and Charity will soon be reached. Life is something more than living, and he who expends the energies of his soul looking after mammon will never see the light of a higher life. Then why should we not work together for good, to the end that our lives may not be altogether in vain? The past achievements of our order are at least secure. Its victories and influences have been as numerous and, in most cases, as delicate as the sands upon the seashore, for the future, it will live, for its principles and declarations are founded on truth and justice. The fool in his heart may say that the grange must die, and in his conceit shut its gates; but while human institutions moulder and crumble into dust, eternal principles never decay. For us "death may be eternal sleep," but if the grange dies, it will live again in the green spring of human hope and action, blessing millions yet unborn.—California Patron.

I would like to see zeal enough manifested in the grange cause to elevate it to its proper standing among the professions. All we want is an equal chance, and I believe that we have it, but, alas! there is a lack of knowledge; some have not attained, and I fear much has been owing to indifference; they have not had a care for what is going on in the wide world, and they have settled down to the conclusion that to work and provide the necessities of life is the chief end of man. But that is not enough; we should have higher aspirations. We find ourselves placed among a vast multitude of people; for what purpose are we here? I can't say; but seeing that we are here in the world let us live to make each other happy, let us lay hold of all the knowledge within our reach that will tend to elevate and improve our minds and morals; let us all be gleaners by the wayside, selecting for use only the true, the beautiful and the good.—Aunt Kate, in Grange Visitor.

Grange Notes.

The Anti-Monopoly League in New York must be making itself felt, as the World, Tribune, and other newspapers controlled in the interest of railroad corporations, instead of answering the arguments of the league, are attacking the cause of its leading members.

A letter of inquiry was written to a person in Michigan recently, by a patron of another State injuring for farm property, as the writer wished to settle in Michigan. He says: Have you a good grange in your vicinity? that is to my wife and me an essential, and we do not wish to locate where we cannot have social and intellectual privileges of a good grange. A word to the wise is ample, if the grange is so valuable to one farmer, why may not it be equally so to all? You must enjoy these privileges to prize them. Those who have never known the benefits of a grange cannot tell how great they are. Let every farmer, then, join a grange. Have one organized if you have none near you, and let the grange be the thing that you make it. It is only a privilege and right of every farmer and his wife to join a grange, but it is a duty they owe themselves, their children, their calling, their country and mankind.

The grange is organized upon the very same general principle upon which all other associations and societies are established—that of one common interest binding all the members together. In this it differs from an agricultural club or society, as usually organized. It differs too in the objects and purposes it has in view. It has a wider sphere of usefulness, it takes a more comprehensive view of the work of the agriculturist. It is not confined to the mere routine of farm life, nor is it contented with "merely causing two blades of grass to grow where but one grew before," and yet that is a grand and noble work. The question is not simply now to produce more, by the application of science to the farmer's profession, but includes also that other important matter, how to save themselves a fair proportion of value created by their industry and labor. The field of operation is a large one and an important one.—Virginia Grange.

The Poultry Yard.

Poultry Notes.

Do not permit parasites to gain the ascendancy, or you will have hard work or poor success. Fowls infested with parasites cannot be thrifty, and more especially young fowls.

Poultry need as much protection during the summer from the fierce rays of sun, as they do in the winter from the severe cold, although far too many of our breeders lose sight of this very important fact, and suffer corresponding losses in consequence.

Young fowls need a certain amount of care, and if one is not disposed to give the attention needed, it is useless to try to rear them with any degree of satisfaction or profit. They should be kept warm, dry and clean, and at the same time they should have plenty of pure air. Unless there are but few and they have an extensive range, they should be fed every three hours between five o'clock in the morning and seven in the evening, and we know of no food more suitable than egg-bread.

The excrement of sick birds are the principal means of spreading the cholera and the first step in stamping out the disease is, consequently, to destroy all which are voiding yellow urates. Care should be had to make the distinction between the urates and the bowel ejections, for the latter are frequently of a yellow color in health; but a little observation will preclude any mistake of this kind. The killing should not be by any method which allows the escape of blood, as this fluid is even more virulent than the excrement; wringing the neck is a quick and easy method of destroying the life. Once killed, the bodies are to be taken beyond the limits of the poultry run and deeply buried.

A correspondent of the New England Farmer describes the henry on the estate of Mr. John W. Brooks, at East Milton, Mass., and the mechanical arrangements for hatching and rearing chickens: "The building consists of four ranges of coops, each 170 feet long by 15 wide. The southern side is provided with large windows, occupying nearly half the front side of the building, and also with sliding wooden ventilators, which can all be thrown open or closed together by means of a simple attachment of wire running the whole length of the building. There is room for 1200 hens. The incubator is heated by a couple of lamps at one end; the eggs are in trays under a tank of hot water, and the temperature is regulated by its contraction or expansion, breaks or completes an electric circuit, which, acting on a clock-work escapement, gives power enough to open or close the ventilators. The machine is bulky and expensive, but it does very good work, having hatched from 70 to 80 per cent. of the eggs placed in it. It holds seven hundred and fifty eggs at a time. The chicks, as fast as hatched, are placed in small paper boxes lined with flannel, and kept warm till they dry off, when they are ready for the artificial mothers. These mothers are of wood, lined with soft woolen cloth for feathers, and their life's blood is warm water circulating from a heater. The chicks, however, take kindly to this sort of treatment, and huddle together under the pipes as contentedly as under the mother's wings. They are fastened in at night by a door of wire netting, and allowed to run, after a few weeks in fine weather, out of doors in yards facing the south in front of the coops."

The Dairy.

Dairy Notes.

Milk turns sour in thunder storms because during their continuance ozone is generated in the atmosphere. Ozone is oxygen in a state of great intensity, and oxygen is the great acidifier throughout nature. The excess of oxygen in the air imparts acidity to the milk by the formation of lactic acid.

As far back as 1789 the States of Jersey passed a stringent law prohibiting the importation of cattle from France, but there never has been, until recently, any legal restriction on the introduction of cattle from England or from the adjacent islands, Guernsey, etc., so that it is by the persistence with which the Jerseymen cling to their own breed that its purity has been sustained. At the commencement of the present century there was an annual export of about 400 head; in 1876 the exports were 1893; in 1877 the number was 1883; in 1878 it was 2011, and

1879 the number was 1634. In the years 1853-4-5 many of these animals were sent to the United States, and there has been a good export to France.—Mark Lane Express.

A Kentucky cow raised on the farm of Erasmus Ellsworth of East Windsor Hill has a remarkable record. April 16 1877, she gave birth to twins, one male and one female; March 18 1878, she gave birth to triplets, two males and one female, making five calves in eleven months and three days; July 9, 1879, she gave birth to twins, both males; Oct. 7, 1880, she gave birth to triplets, two males and one female, making ten calves in the three years five months and twenty-one days. The calves have all been of good size, healthy and handsome, and have been raised on the farm.

A classification of different breeds may be made in a general way as follows: If butter dairies in the object, Jerseys and Shorthorns; if it be cheese, Ayrshires, Shorthorns and Holsteins; if beef, Herefords, Shorthorns, polled Angus, Holsteins and Devons; if working oxen, Herefords, Shorthorns, Devons, Holsteins and the polled Angus. There are families of excellent milkers in all the breeds we have named, but we have classified them according to their general reputation. For beef, a cross between the Shorthorns and Herefords has proved to be superior to either when pure bred; a cross of Shorthorns and Jerseys often produces excellent milkers; we have a cow of this kind and it would be no easy matter to match her either as a milk or butter producer. Some of the pure bred Holsteins have achieved remarkable dairy records both in butter and cheese, and in respect to the latter, they are closely contesting the ground with the Ayrshires. There are also good milkers among the Herefords, though their great claim to public favor is in the direction of beef and working oxen. The polled Angus cattle have a high reputation for beef and are also excellent workers. A western paper says they can be bred at least ten per cent cheaper than horn cattle.—Maine Farmer.

Carbolic Sheep Dip is the best. Address G. Milnebrook & Co., St. Louis, send for circulars.

The Hon. J. A. Dacus' illustrated Lives of the James and Younger Brothers, published by N. D. Thompson & Co., St. Louis, has reached a sale of 50,000 copies in ten months. The demand is wonderful. Book agents are reaping a rich harvest with it. 16-13

OFFICE OF

A. J. CHILD,

GENERAL PURCHASING AGENT

ST. LOUIS, MO.

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We furnish first-class standard plows at the following prices, on board cars in St. Louis. Cash with order:

STEEL BEAM, SINGLE SHIN.
10-inch \$10 50
11 " 11 00
12 " 11 75
15 " Three-Horse 15 00
16 " " 15 75

STEEL BEAM, DOUBLE SHIN.
12-inch \$13 00
14 " Two-Horse Only 14 25
15 " Three-Horse 15 25
16 " " 16 25

WOOD BEAM, SINGLE SHIN, BAR SHARE.
10-inch, Low Landside \$ 8 50
11 " " 9 00
12 " " 9 25
14 " " 2-Horse 10 75
15 " " " 11 25
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WOOD BEAM, DOUBLE SHIN, BAR SHARE.
12-inch, Medium Landside \$10 75
14 " " 2-Horse 12 25
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RIDING PLOWS.

We furnish the Peoria Riding Plow, which, with the improvements made within the last year, is now conceded to be the very best riding plow in use which has the plow between the wheels. For lightness of draft, quality of work, and the perfect control the driver has over the plow, it excels all others.

We also furnish the celebrated Hughes Riding Plow. This is the only plow which works with both wheels on the hard ground; the plow being on the side, in plain view of the driver. This plow runs independent of the motion of the frame. And while the work may be over rough corn ground, the plow preserves a uniform level, thus leaving a plain, smooth surface. The reputation of the Hughes Plow does not require any bolstering up by us—wherever it is in use, it supercedes all others.

We are not at liberty to publish the prices at which we furnish the above riding plows, but will cheerfully give prices on application; and can assure our friends they are beyond competition. Address A. J. CHILD, St. Louis, Mo.

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We offer the celebrated Lowe's Improved X. L. N. T. Fan Mill, with grass seed sieves included, for \$18 on cars in St. Louis.

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Send for descriptive circular and prices of the best grain drill in use. A. J. CHILD, St. Louis, Mo.

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PERRY DAVIS' Pain-Killer



A SAFE AND SURE

REMEDY FOR

Rheumatism,

Neuralgia,

Cramps,

Cholera,

Diarrhoea,

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Sprains

AND

Bruises,

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PAIN-KILLER is the well-tried and trusted friend of all who are afflicted with any of the above named ailments, and can be freely used internally or externally without fear of harm and with certainty of relief. Its price brings it within the range of all, and it will equally save many times its cost in doctor's bills. Price, 25 cents, 50 cents, or \$1.00 per bottle. Directions accompanying each bottle.

FOR SALE BY ALL DRUGGISTS.

KIDNEY WORT

THE ONLY REMEDY

THAT ACTS AT THE SAME TIME ON

THE LIVER,

THE BOWELS,

AND THE KIDNEYS.

This combined action gives it wonderful power to cure all diseases.

Why Are We Sick?

Because we allow these great organs to become clogged or torpid, and poisonous humors are therefore forced into the blood that should be expelled naturally.

Why Suffer Bilious pains and aches? Why tormented with Piles, Constipation? Why frightened over disordered Kidneys? Why endure nervous or sick headaches? Why have sleepless nights? The KIDNEY WORT and rejoice in health. It is a dry, vegetable compound and one package will make six quarts of Medicine. Get it of your Druggist, he will order it for you. Price, \$1.00.

WELLS, RICHARDSON & CO., Proprietors, (Will send post paid.)

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Liquid KIDNEY WORT

In response to the urgent requests of great numbers of people who prefer to purchase a Kidney-Wort already prepared, the proprietors of this celebrated remedy now prepare it in liquid form as well as dry. It is very concentrated, is put up in large bottles, and is equally efficient as that put up dry in tin cans. It saves the necessity of preparing, is always ready, and is more easily taken by most people. Price, \$1 per bottle.

LIQUID AND DRY SOLD BY DRUGGISTS.

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FOURTH YEAR COLMAN'S RURAL WORLD. NORMAN J. COLMAN. \$1 Per YEAR.

ADVERTISING: 25 cents per line of space; reduction on large or long time advertisements. Address NORMAN J. COLMAN, Publisher, 300 Olive Street, St. Louis, Mo.

The cremation society of this city has kept exceedingly still the past few weeks. The association will come to the front and catch the public ear more readily when the cold weather sets in.

Tennessee has been shipping more peaches to this market, the past week, than any other state. Union City shipped about 200 boxes daily, while Gadsden and Humboldt made a creditable showing of about half that number.

Strawberries of very fine quality, and in good condition, notwithstanding the intense heat, have been coming to the city the past three weeks from Racine, Wis. This lengthens the season to over three months of steady receipts in St. Louis.

Late advices from Washington state that the condition of the President is that of steady improvement, his appetite and strength gaining daily. With such favorable circumstances continuing he will soon be able to take horseback exercise.

President Garfield is still on the mend, and his physicians now consider him out of danger. His death by the bullet of an assassin would have been deeply deplored by every good citizen of the nation. Let us be devoutly thankful that his life has been spared.

The convention of the cotton men begins to-day in St. Louis. It will be perhaps the most important they have ever held, and the exhibits of new machinery will be most interesting. The subject of the utilization of water power in the south will be minutely considered.

The outlook for the grape crop is not very bright. A good portion of the crop is already gone through rot. In several of the vineyards in this county the fruit is rotting badly, also at many places on the I. M. R. R. and at Alton, and vicinity a good deal of the fruit is going the same way.

The sufferings of St. Louis people during the heated spell, 10th to the 16th inclusive, were nothing compared to those of Cincinnati during the same time. St. Louis' death record was 316, but in Cincinnati the deaths from sun-strokes, and excessive heat alone, were 414, and the total 567.

A peculiar feature of the present summer season, is the large number of eastern tourists who instead of making Europe an objective point are "doing" the splendors of Colorado and California. The influx of English, French and German tourists on trips of observation has been exceedingly large.

Missouri resources continue to develop amazingly. The latest and most remarkable novelty is a mineral spring discovered near Rolla, possessing all the qualities of Vichy. The effete countries of Europe will soon have all their sources of revenue from this side of the creek cut off, if this thing continues.

A heavy shower fell at St. Louis and vicinity on Wednesday of last week. The earth was very dry, the corn and grass were suffering with thirst, and never was rain more welcome. One or two more such rain falls within a couple of weeks and the corn crop will be safe. There is a fair prospect of a large crop of corn this year.

Grapes have been offered in the St. Louis market the past ten days. The Hartford and Ives constitute all the varieties offered so far. The first receipts were from Grand Bay, Ala. Little Rock, Ark., is shipping more freely at present, than any other point, and realizing handsome prices, 12 to 15 cents per pound, for the varieties named.

"Bull" butter is played out in St. Louis," said a dealer a few days ago. "We have been wide awake, but find no instances in which we can test the new law." Very good, gentlemen, keep wide awake and vigilant until you find an example. A law without a precedent for its illustration is never half so strong as where offenders have been punished under it.

The hot weather has sent thousands northward in search of arctic breezes. The weather has been so warm north of us, however, that what there was of arctic in the breezes originally, was changed to torrid before reaching St. Louis. A white bear would have been changed to a black one in a few hours if he had been in St. Louis at any time within the last three weeks.

No place in the country has ever acquired such sudden and emphatic success as a summer resort as Creve Coeur Lake, situated 18 miles west of St. Louis. Since the Missouri Pacific R'y. ran an extension from Laclede to the lake it has been an almost constant scene of picnics and pleasure parties.

On August 20th a magnificent affair will take place, this being a grand festival with fireworks, calcium illuminations, and various other attractions. The festival will be under the management of Mr. Dan'l E. Carroll, who has supervised and superintended the famous Veiled Prophet processions at St. Louis for the past three years.

The long promised "mid-summer" number of the N. Y. Mirror has come to hand and it certainly more than carries out the promises made for it. The letter text, the typography, engravings and quantity constitute it one of the most attractive issues ever published in this country. For those interested in the stage the Mirror is a shining light.

California carried over several million bushels of wheat of the crop of 1880. She was last year unable to consume or dispose of the bulk of the crop at home, and the great scarcity of grain vessels the latter part of the season, left the farmers unable to ship to Europe. It was however a fortunate misfortune as the prevailing prices are much higher than they ever looked for.

New onions have been very scarce so far in this market, the present season, and prices have ruled from \$3.50 to \$5.00 per barrel. New potatoes have come in so freely, the past week, that the market is demoralized, and shippers would do well to step out of the market for a week or two. Apples are in good demand at good prices. Shippers are unable to get sufficient suitable stock.

For nearly three weeks the heat has been almost unbearable. It has been continuous. Even the healthiest began to wither under its blighting influence. On Monday of this week however there was a change for the better. The breezes became cooler and were most heartily welcomed by all animate life. It is to be hoped that we shall not have another such spell of heat the present summer.

The large number of crazy men at large, and especially the little army of them that appear to be encamped at Washington City, looking for an opportunity to kill somebody, should be sent out on an Indian reservation. Here they could indulge their whims without disturbing the public peace to such an alarming extent. It would not be half as bad to shoot down one another, or some wild Indian, as to shoot a President.

There is a very bitter war now going on between many of the railroads running east not only relative to passengers, but also to freights. Shippers have little room for growling, especially those operating between the principal cities. Apples, potatoes and similar products can be shipped from St. Louis to Chicago for ten cents per hundred pounds. A traveler desiring to visit Niagara falls can get a round trip ticket from this city for ten dollars.

The extremely hot season through which we are now passing, has demonstrated the highest average temperature ever experienced in this section. The mortality however has been comparatively light and although the death rate has been very large, it does not begin to compare with the records of some years ago. At one time a temperature of 106° or 108° could scarcely have occurred without people dropping by the wholesale. On this topic we will have something to say next week, based upon observations made at the St. Louis hospitals and dispensary.

Some English and other European writers and scribblers evidently working in the interests of the anti-immigration party have been packing off scores of lies about wholesale robbery and lawlessness in the west, the same appearing in periodicals abroad. The fact is the laboring classes in Europe are finding no lawlessness so oppressive as that which presses a man into military service, and no robbery so sweeping and wholesale as that which takes all the results of his labor—save the merest living pittance—for the support of a selfish overbearing and aristocratic class of non-producers.

The Farmers' and Merchants' Fair will be held in Louisiana, Mo., Aug. 16th, 17th, 18th, 19th, and 20th, 1881. There will be running and trotting races every day during the fair. Tuesday, Aug. 16, mile heats for untrained horses. Wednesday, Aug. 17, pacing race; half mile dash running race and grand horseback tournament for silver prizes. Sir Knights in uniform. Thursday, Aug. 18, free-for-all trot, \$400, purse; also one mile running race. Friday, Aug. 19, trotting race nearest three minutes; running race half mile heats. Saturday, Aug. 20, fastest double team, and 240 trot. Grand promenade of premium stock in show ring.

The various county and local fairs in Missouri and adjoining states would find it greatly to their interest to advertise them in the RURAL WORLD. If these associations want a fine display of agricultural implements and machines; if they want the improved breeds of cattle, horses, sheep, swine and poultry at their exhibitions—they should let the public know what inducements they offer for them. There

is no use of trying to have a large attendance of visitors unless there is something worthy of being seen. Have a good exhibition and it will draw of itself. Everybody will talk about it and there will be a general turn out to see it. It does not do to keep the light under the bushel, let it shine. Advertise exhibitions and by that means you will get exhibitors that will be a credit to your fairs.

The watermelon season is now at its height. Mountains of melons loom up along the wholesale thoroughfares, and attract the attention of all who happen that way—the light receipts of fruit offered a wider and better field for the melon trade this season. The receipts range from 16 to 20 carloads per day, and they are mainly from southeast Missouri. Diehlstadt and adjacent points expect to ship 3,000 carloads this season—a good many of them however, going to Chicago, Cincinnati, Louisville and a few other cities. The business will be quite remunerative, the demand and the prices being far above the average.

Prof. C. V. Riley, has been appointed by Commissioner Loring, Entomologist for the Department of Agriculture. In making this appointment our worthy commissioner has carried out the views and wishes of more than nine-tenths of the agriculturists of the United States—we mean, of course, those who have views on the subject. Prof. Riley has no superior as an entomologist in the United States. His qualifications for the position are of the highest order. And he has, besides these, that indomitable push and pluck so essential to the highest success. To use a common expression, he carries a great amount of steam to the square inch. He can turn off more work per day than any man we are acquainted with. There is no such word as fail in his vocabulary. What he undertakes he performs. It is this quality of persistence so conspicuous in his mental organization that has placed him at the top of his profession, while yet a young man. He has given to the public a large number of valuable reports which are in great demand in this country and in Europe. We are glad he is placed in a position where he can continue to perform such valuable service to the agricultural interests of the whole country.

Wilson County, Texas.

COL. COLMAN: Being a constant reader of the RURAL WORLD, I notice many correspondents showing up the advantages of their particular localities by way of inducing emigrants to their section, but so far none from southwestern Texas. I do not propose to tell what I know of so broad an expanse as all southwest Texas, but to confine myself to a very small portion thereof, known as Wilson county. This county is southeast of Bexar county, and about 12 miles from San Antonio to where you enter the county, lying on both sides of the San Antonio and Cibola rivers. The face of the country generally is rolling except the valleys of the above named streams, well timbered, with here and there some prairie. The soil is mostly sandy loam, with occasionally a black land streak in the prairies and river valleys, easy of cultivation and remuneratively productive. The black lands and valleys produce corn, cotton, oats, wheat, rye, barley, &c., well. The uplands produce the same crops, but are better and highly adapted to cane culture, such as Early Amber and Orange canes. These canes have never been known here until last year when your correspondent induced a number to try the Early Amber with fine success.

The writer made some syrup that compared well with cello from the Louisiana ribbon cane, and in remunerative quantities. There is much more being grown this year, the result of which I may report you later. Lands here are cheap, prices ranging from \$1.50 to \$10 per acre, according to quality, locality and improvements. Some fine bodies of land for colonization are being offered low, and in desirable localities. At the village of Sutherland Springs, on the Cibola river, are the finest medicinal waters in the world—a broad assertion, but I think I know whereof I speak. In the world's history of mineral waters there is not the variety to be found that there is here, the principal of which are the Black and White Sulphur, Sour, Chabibete, and Salt Springs, the history of which furnishes many almost miraculous cures of rheumatism, scrofula, dyspepsia, liver complaint, cutaneous diseases, syphilis and the whole catalogue of female ills. Near those springs are several fine farms for sale low, some more and some less improved, and just at this time we almost have the certainty of a railroad to this place, which will certainly increase the value of lands, and must say render this section among the most desirable in the State, and render those springs more accessible to invalids, and particularly those from northern climates afflicted with diseases that they so certainly cure. But I am stretching out too long and will conclude by saying that I am ready to answer and give any information that may be sought for. Address Sutherland Springs, Wilson County, Texas. W. J. MORRIS, M. D. July 11th, 1881.

John Lowe of Jacksonville, Ills., writes: "The bugs are getting away with our crops fearfully, wheat will not make in this section one fourth a crop, and cane is being devoured by them. Hay crop is light, corn looks well but is late. Fruit is a light crop. J. L."

Drying Sweet Corn.

I prefer boiling just enough to see the milk. (Some do not boil at all, but cut off at once and put into the house.) I cut it off with a very simple contrivance called a corn-cutter, on which I think there is no patent. It consists of a board about 16 inches long and 6 inches wide, set on legs, in which a knife is set so that it can be raised or lowered to suit, while one end is armed with a scraper, to remove the hearts. Thus I cut off the top of the grain and scrape out the remainder quite rapidly. I use the American dryer, which evaporates quite rapidly in current of very hot air, which I think preferable to a cold current. It also has the advantage of freedom from eggs of insects. The corn, as removed from the cobs, is placed on thin muslin, placed on galvanized wire trays and passed through the house. If cut off without cooking, I find that the corn sticks to the muslin worse, and is much more troublesome to remove.

There is one point necessary to observe, and a very important one. This is not to let the corn get too old before drying. One of my neighbors dried 600 pounds last season, but let it get too old so that it was difficult to market. It should be just in condition to be right for the table. Drying does not change it. When it gets too old it does not dry away so much, but is very inferior. I plant in small patches, so as to continue the season as long as possible. Last season I sold all I could spare, very readily at a fair price, and there was demand for much more; so this season I am preparing to raise as much as I can handle while it is in proper stage. —Ex.

The Successful Farmer.

The good farmer cultivates forethought. His plans are not made for a single year. He looks over his farm, divides the arable land into about six equal parts, one-half of which is devoted to grass and the other to the plow, as each shall take its turn. Every year he raises just about so many acres of corn, so many acres of wheat, so through all his crops. He keeps just about the same amount of stock, and of each about the same, whether it be cattle, sheep, horses or hogs. Steadily he pursues the even tenor of his way. Having once laid his plans with care and forethought, he closely pursues with systematic order the plan adopted.

No matter whether wheat brings 75 cents a bushel or \$1.75. No matter whether wool brings 31 or 50 cents per pound. No matter whether cheese brings 6 or 13 cents at wholesale. No matter whether live hogs bring 3 or 8 cents per pound. Thus he continues year after year, all the time studying to improve the productions of his farm, and thus increase its capacity to produce a little more of each of the different articles he raises for sale. But no single one is dropped from the list that he may raise more of something else without a long considered and sufficient reason. If anything he may have for sale is very low in price, he knows at once that the great pendulum of equilibrium has swung away from it. He also knows that it will surely swing back again sooner than he can change his rotation, even if he wanted to, which he does not.

He is accurate in all his affairs. He knows just how he stands. Knows who he owes and who owes him, what it is for and when it is due. He also knows just how he expects to meet every claim against him, has calculated accurately the matter before he incurred the debt, and with prompt payments thus in a few months making his word as good as his written bond. More than this, he knows by his accurate and full diary condensed into yearly statements what each succeeding year has produced him. He knows what the average price of every article he raises for sale has been in his market town for all the years since he has had produce to sell. If he has an article for sale and the price is a long way below the average, he holds the same until the pendulum swings back again.

If the price is fully up to the average he does not wait with the expectation of getting the very highest cent that will be paid just before the pendulum falls back again. He sells at the highest current price, knowing that once the highest price is reached, stagnation and a fall so quickly succeeds that not one in a hundred men can be the lucky man to get the highest price paid. Thus his average gains will compare with the best. Slowly it may be, but surely he is getting rich and all the time living better than many of the kings of Mammon. While he sleeps his crops and his animals grow. Fancies cannot ruin him. As it has taken time to acquire his riches, he generally knows how to keep them, while the merchant or manufacturer may be rich to-day and poor to-morrow and not from any fault of his own.—Edwin D. Pierson, Hudson, Mich.

A Healthy State.

People are constantly changing their homes from East to West and from North to South or vice versa, in search of a healthy State. If they would learn to be contented, and to use the celebrated Kidney-Wort when sick they would be much better off. The whole system can be kept in a healthy state by this simple but effectual remedy. See large adv.

Successful farming can never be realized in the absence of a deliberate plan. No other business succeeds without it, and there is no known reason why farming should be an exception. These are the days, and especially the evenings, when the tiller of the soil and the breeder of cattle, sheep and horses is at liberty to sit down with himself and study the situation. Now is the time to mature his plans for the next season's active campaign; to map out, not only in his mind but on paper, the distinct outlines of the year's work; to study the needs of one field over another, that all may advance harmoniously in productive progress; to decide what he will plant and sow, what he will take up and what he will lay down; how he will proceed with manures and commercial fertilizers, and where it may be better to plow under a crop of clover; how many head he intends to carry into the fall, and how many to winter; about the improvement of his

breeds, the best mode of final marketing, and when his profits can afterward be most effectively applied on his farm. Taking all the different branches of his industry into a single view, he must be incapable of comprehending affairs about him who does not feel stimulated by his reflections.—Massachusetts Ploughman.

COL. COLMAN: The only reason we can give for the cane seed not sprouting this spring, is that much of it was planted too deep for the amount of rain we had, and the fault is not in the seed. W. E. FOSNOT.

Little River, Kansas.

Unlike other cathartics, Dr. Pierce's "Pellets" do not render the bowels costive after operation, but, on the contrary, establish a permanently healthy action. Being entirely vegetable no particular care is required while using them. By druggists.

According to Capt. Eads, the jetty system has increased the grain shipment to New Orleans forty-fold in six years. Cotton export has increased as transportation charges are reduced. When the barge system, now too limited, is enlarged, freight on grain can be reduced from eight to three cents a bushel. It is computed that the Jetties have saved the tributary states \$25,000,000 per annum. Capt. Eads for \$5,000,000 offers to secure a twenty-foot channel at all seasons, from Cairo to New Orleans.

The Society for the Promotion of Agricultural Science will hold its annual meeting at Cincinnati on Tuesday, August 16th, the day preceding the sessions of the American Association for the Advancement of Science. The officers of the Association are Prof. W. J. Beal, Lansing, President; Dr. E. L. Sturtevant, South Framingham, Mass., Secretary. The meetings for the reading of papers and their discussion will be open to the public, and all interested in agricultural science are invited to attend. Among the papers to be read are two by Prof. A. J. Cook, of the Agricultural College, two by Prof. R. C. Kedzie, and one by Prof. W. J. Beal.

There is no disputing the fact that any farm implement, be it wagon, plow, harrow, reaper, rake, or what not, if left exposed to rain and sun for ten years, will be practically good for nothing. We might say in five years, but if any chose to cavil at five, we will say ten. This is ten per cent per annum. At this cost of some kind, even if but rough boards, that will shut out sun and rain, but steady, waste, we are apt to forget that it is ever going on. It is unnecessary to suggest the "application" of this short sermon. Nine per cent interest saved is not to be despised, even if better times are at hand.

This year the thirteen year brood of locusts cover the greatest area in the Southern States and in the Mississippi Valley. The entomologists say that the two broods of thirteen years and seventeen years have not appeared simultaneously before since 1600. Agriculturists may be content with the prediction that they will not again appear in the same year until 2102. This "harvest-fly," or periodical locust, is a large black insect, with red eyes and four transparent wings. The insects are harmless, although it is said that the females sometimes, while carrying food to their young, may inflict a painful sting if interfered with. The only injury they may cause is in boring holes in the trees in young orchards for the deposit of eggs.

It is a foolish mistake to confound a remedy of merit with the quack medicines now so common. We have used Parker's Ginger Tonic with the happiest results for Rheumatism and Dyspepsia, and when worn out by overwork, and know it to be a sterling health restorative. See adv.

The peach borer must be hunted for and killed now. The worm will be found from the roots all the way up the trunk wherever there is an exudation of gum. Use a sharp knife to clean out the hole and a wire to probe for the worm. After destroying all the worms use a plaster on the wounds of the tree, composed of cow dung and clay, to which add some flowers of sulphur and salt, say a tablespoonful of each to a gallon of the mixture. The plaster can be made thin enough to be dipped up with a hearth-broom and brushed on. After applying the mixture around the base of the tree, draw the dirt back and bank it up quite high, so as to prevent the butterfly from laying its eggs near the roots. Next October look after the borer again and destroy all that may have hatched out. It is only by constant attention three or four times a year that this pest can be kept in check. —Home Journal.

"GOLDEN MEDICAL DISCOVERY" (Trade mark registered) is not only a sovereign remedy for consumption, but also for consumptive night-sweats, bronchitis, coughs, spitting of blood, weak lungs, shortness of breath, and kindred affections of the throat and chest. By druggists.

For all people, in sickness or in health, lemonade is a safe drink. It corrects biliousness. It is a specific against worms and skin complaints. The pippins crushed may also be mixed with water and sugar and used as a drink. Lemon juice is the best anti-scorbutic remedy known. It not only cures the disease, but prevents it. Sailors make a daily use of it for this purpose. A physician suggests rubbing of the gums daily with lemon juice to keep them in health. The hands and nails are also kept clean, white, soft and supple by the daily use of lemon instead of soap. It also prevents chilblains. Lemon used in intermittent fevers is mixed with strong, hot black tea or coffee, without sugar. Neuralgia may be cured by rubbing the part affected with a lemon. It is valuable also to cure warts and destroy dandruff on the head by rubbing the roots of the hair with it. In fact, its uses are manifold, and the more we employ it externally the better we shall find ourselves.

A Nebo, Hopkins county, correspondent of the Henderson Reporter, says that the tobacco crop in that section was set as much as four times, and yet they have not a good stand.

Live Stock Breeder.

We had the pleasure of a call from W. E. Pew, son of R. C. Pew, of Prairieville, Pike county, Missouri, who is on his way to Canada to purchase fine stock. Messrs. Pew are stocking their farm with the very choicest imported animals, and those wanting fine stock should give them a call.

Educating Animals.

To educate an animal is not to force its nature, but to tame and direct it so as to make it fit for the service or the society of man. This is not a very difficult task for one who knows how to go about it. Most animals are drawn toward man, whose superiority they recognize by instinct, whom they are bound to please, whose love is agreeable, and whose protection is advantageous to them. But before these relations are established, there is an obstacle to be conquered, the distrust natural to the lower animals. The first step to be taken, then, is to secure the pupil's confidence. Unhappily, many do just the contrary of what is necessary to secure this end. Some brutal men know only how to maltreat their animals, which do not obey because they do not understand. Other men make playthings of them, and others fatigue them with inopportune caresses. Do none of these things. Never harm him, and his confidence will be secured. When these relations are established he will come to be caressed of his own accord. Always be careful of him, but without feebleness or opportunity. Never tolerate a vicious act; never be defied; but be indulgent for unintentional disobedience, or for any damage done unintentionally. Well-doing should always be rewarded with a caress. In habitual intercourse be reasonable. Violence and blows are bad means of education for animals as well as for men. Force makes itself obeyed, but only on condition of continual action. It sometimes happens that despair revolts against even force.

The New England Roadster.

Those who have not carefully studied the subject of breeding will be surprised upon investigation to see how great a proportion of the best carriage horses, the finest roadsters, and the fastest and most enduring trotters trace directly back, through sire or dam, to imported Messenger, a gray, thoroughbred race-horse, bred by John Pratt, Esq., of Newmarket, England, foaled in 1780, put on the turf in the fall of 1783. During his turf career he started in thirteen races, eight of which he won. Brought to America in the spring of 1788, landing at Philadelphia, Pa., and making five seasons in that vicinity, when he was taken to the State of New York, where he was kept at different points, with the exception of one or two seasons, until his death, which occurred on the 28th of January, 1808, at the place of Mr. Townsend Cook, Long Island, N. Y.—he was a very popular horse, and during the twenty years that he stood in this country for stock purposes it was estimated by one of the most eminent horsemen of America, the late Hiram Woodruff that he left not less than one thousand sons and daughters. As he was universally held in such high esteem, his probable that a large number of his sons were kept for stock purposes, three of which became very distinguished for perpetuating the excellent qualities of their sire. These were Bishop's Hambletonian, Mambrino and Winthrop Messenger. Bishop's Hambletonian, formerly called Hambletonian, was a dark bay about fifteen and one-half hands high, a little heavy about the head and neck, rather an upright shoulder but as good a back loin and hind-quarters as was ever seen upon a horse; and although his head and ears were a little coarse, yet he was considered a beautiful saddle-horse. He was bred by Gen. Nathaniel Coles, Dorset, Long Island, and foaled in 1804. His dam, Pheasant, was by imported Shark, a son of Markese, sire of English Eclipse, the successful race-horse ever produced in England, a horse whose extraordinary powers became so generally admitted that no owner could be found who would enter a horse against him, for which reason alone he was obliged to retire from the turf. The dam of Pheasant was by imported Medley, one of the best horses ever imported from England and regarded there as one of the best in his day. Hambletonian was fitted for the turf when young, and used for several years for racing purposes with good success. He became more noted, however, as a sire of horses remarkable for speed and endurance at the trotting gait than a racer. He was sire of Sir Peter and Whalebone, both distinguished trotters in their day.

At Philadelphia, Pa., Oct. 6, 1831, the latter trotted three-quarters of a mile against time, to beat 1h. 58m. 31sec., which he won in 1h. 58m. 5sec. Hambletonian was also sire of Harris Hambletonian and Harpinus, two excellent animals, which possessed the power to transmit the characteristic qualities of the Messengers to their offspring in a marked degree. The former was bred by Mr. Isaac Munson, Wallingford, Vt., and foaled in 1823. He became distinguished more through the performances of his offspring upon the turf than through any trotting contests in which he participated. The most distinguished of his get was the gray mare Sontag, that beat the trotting wonder Flora Temple, at Union, L. I., May 7, 2:35, 2:35, wags and drivers weighing 300 pounds. Several others of his get were first-class trotters in their day, while some of his sons and daughters became very distinguished through their descendants. His son, young Hambletonian, was sire of the dam of Sherman Black Hawk, sometimes called the North Horse, one of the best of Black Hawk's get. This horse, Sherman Black Hawk, coupled with a daughter of Harris Hambletonian, produced Gen. Knox, sire of Lady Maud (2:18 1/4), Camors (2:19 3/4), others (2:23), Knox Boy (2:26 1/4), and six others (including Peaceful whose breeding I believe has not yet been satisfactorily established), with records in 2:30 or better.—Am. Cultivator.

THE KINGS OF THEIR KIND

AMERICAN STALLION RACE EVER TROTTED IN

It was a grand success, in every particular. As a race for stallions exclusively, the long and hard-fought contest on the Rochester driving park July 4, stands without a parallel in America. There were upwards of 10,000 people in attendance. It seems that the torrents of rain which fell in the morning could no more dampen the enthusiasm of the local patrons of horse races than it could effect a postponement of the great \$10,000 event. While the officers and members of the driving park association are to be heartily congratulated upon the result as it is, there is the gratifying certainty that but for the rains, Sunnyside's best stallion time, 2:15 1/4, would have been beaten. With a soggy, heavy track, the best time made came within three seconds of the best time in which any stallion has ever trotted a mile. In fact every one of the seven straight miles trotted by the reliable horses, came marvelously near, all things considered, to the maximum speed in the careers of the very fastest trotters of any kind.

At 1 o'clock the track was very heavy in patches, but the trackmen were set at work scraping it as soon as its condition would permit. They made a mistake, however, in scraping the outside first and opening it up to the drying influences of sun and breeze, while the ground to be covered by the pole horses was left to retain its moisture as long as the heavy clay in its composition would do so. But finally in the succession of things, the drags got around to this important part of their work, and the track began to show great improvement.

During the hour or two before the races, continuous crowds of people kept fairly pouring in upon the grounds in unbroken throngs, with perfect processions of carriages winding along at their side through the public drives of the park. All along the fences from the driving park hotel, as far as the distance stand west of the wire, there was a black line of moving people, each one of whom was seeking the best possible standing point from which to view the contest between America's greatest and swiftest stallions. The long, triple grand stands began to be filled in early with people, and some time before the beginning of the trials of speed it was clearly evident that in at least one particular the event was sure to prove a grand success. The estimated number of people, as above, was given by a driving park man. The association must have nicely cleared several thousand dollars.

THE STALLION RACE.

It was 3:30 o'clock before the bell called out the noted stallions who were to trot for the honors of the day. As they came jogging up the track from the stables they were cheered by the people in the grand stands. Particularly noticeable and attractive were the neat jockey jackets and caps which had been provided by the association for the drivers and were worn by the latter. There seemed to be great enthusiasm and interest in the race, and long before it was called there were lively times at the pool stands, with McGregor selling as a strong favorite, at \$150, against Alexander at \$100, Santa Claus seventy dollars, Wedgewood fifty dollars, Hannis forty dollars, Monroe Chief twenty-five dollars, and Bonsetter ten dollars. Voltaire, Independence and Amber were drawn. The other seven drew positions for a start as follows: Wedgewood, pole; McGregor, second, and Santa Claus, Hannis, Bonsetter, Monroe Chief and Alexander making next places in the order named. The betting continued to be excitedly carried on until the horses began to score.

FIRST HEAT.—More than a dozen times the seven scored down past the judges' stand, but as often were compelled at the tap of the bell, to come back and try it again. The greatest trouble was that big black Alexander and his driver seemed determined to score down about four or five lengths ahead of the pole horse. A like tendency in less degree was shown by the handsome and rapid chesnut stallion McGregor, but he couldn't help it, for he is one of the liveliest sort of stallions that has been given the word on the Rochester track in a long time. After half an hour had been frittered away in scoring, the judges got the horses well together and told them to "go." This they did in handsome form, with the exception of Santa Claus, whom Hickok could not keep on his feet after the long and fretful scoring. Hence it was that he fell back behind such scampers as Monroe Chief fifth, and Wedgewood sixth. Meanwhile none of the others were waiting for them, but Alexander the black horse, because in a technical sense also the dark horse, and took the pole before he had even rounded the first turn. His most intimate companions here were Bonsetter second, McGregor third and Hannis fourth, and thus they remained at the quarter. As they strode up into the back stretch there was just about a length between each of the seven and the one nearest him in front or behind. Consequently there was nothing close or exciting before they reached the half-mile post, when it became evident that McGregor had been only fooling with Bonsetter. Just after they shot by the post McGregor shot up alongside the bald-faced Bonsetter, and gave him something to do. In fact "a change" seemed to be the motto all around, and all of them excepting Alexander at first and Hannis at fourth places did live up to the motto, and change around. They passed the third quarter, and rounded the last turn in this order: Alexander, McGregor, Bonsetter, Hannis, Monroe Chief, Wedgewood and Santa Claus neck and neck. Coming down the stretch McGregor lost his nerve, broke and ran, as it he must have first place, in one way he couldn't gain it in another. But in this he failed, because of an honest driver's restraining muscle. The heat was finished with the horses as close together as when they got the word. And this is the order in which it was done: Alexander, first; Hannis, second; Bonsetter, third; Hannis, fourth; Santa Claus, fifth; Monroe Chief, sixth; and Wedgewood, off his feet, in the rear. Time—2:19.

SECOND HEAT.—After Alexander's first victory his friends became very demonstrative, but still seemed to be afraid of McGregor. The pools sold \$50 for McGregor to \$60 to \$80 for the field. The scoring was beginning to be tedious, with McGregor displaying less spirit than the first heat, and Alexander anxious to get away. Wedgewood would not come up in any kind of shape, and, after tailing the others several times on the trial scores, he was about two lengths behind when the others were sent away well together, none ahead of Alexander, and none able to get ahead of Wilson watched his nearest neighbor, McGregor, closely and let the black beauty go as fast as he wanted to. McGregor behaved very well and trotted very fast for the first eighth, and Hannis and Bonsetter worked well, better than in the first heat. Alexander reached the quarter pole a full length ahead of McGregor and little fourth, Santa Claus fifth, Bonsetter sixth, and Wedgewood a miserable seventh, owing to the fact to his starting so far behind. Bonsetter increased his speed on the second quarter and drew away from Santa Claus before the half was reached. That point was passed in this order: Alexander, McGregor, Hannis, Bonsetter, Santa Claus, Wedgewood. From that point the race was most interesting, for it was evident that Alexander was letting up a little in speed, it was also plain that McGregor and Hannis were increasing very rapidly, the former upon the latter and both upon the pole horse. The horses all worked hard about midway between the half mile and the three-quarter poles, and there was no change of position among the last four horses until the three-quarter pole was reached, when Hannis, by a magnificent burst of speed, reached by McGregor for a moment, and Bonsetter showed his nose ahead of Monroe Chief. When they whirled into the stretch every spectator almost held his breath, for Hannis was going like lightning and McGregor was full of business to keep from being overhauled and headed by John Turner's horse. Alexander meantime was trotting evenly, but not so fast as his two most dangerous competitors, and they closed the gap so nearly up to the general conviction was that he would be headed by McGregor with Hannis hanging to his flanks unless Wilson made him go faster. Wilson whipped him when he was ten rods from home, but McGregor kept going very fast and went under the wire head and shoulders ahead of Alexander, who, it seems, ceased to make an effort when he was two rods from home. Hannis was good for second place if he had kept his gait down the stretch. He did not do that thing, however, for Turner pulled hard upon the ribbons and kept him back. McGregor reached the wire first, with Alexander second, Hannis third, Santa Claus fourth, Monroe Chief fifth, Bonsetter sixth, and Wedgewood a bad seventh. A great shout went up from McGregor's many admirers, and his stock went up with a bound. He seemed little exhausted with the effort, while Monroe Chief, Bonsetter and Alexander showed signs of weariness. Time, 2:19.

THIRD HEAT.—There was little time for any considerable delay in the big race, and the consequence was that before the last exhibition heat was finished in the other race, pools began selling lively on the stallions. McGregor was the favorite at \$50, against all the others lumped in the field, at \$30. But there were more pools sold in about the same ratio, with McGregor favorite at \$25, against the field at \$15 and \$16, with ready takers and lots of them. Only three or four times did the handsome field of horses score for a start. Then they got off nicely together shortly after 5 o'clock. There was a strong struggle from the first for the lead, with McGregor striving to keep it, Alexander drawing in to take it away from him, and Bonsetter doing his level best to shut them both out. But black Alexander was the successful contestant in this little matinee. He curved around ahead of McGregor, put him in a pocket and buttoned it up to prevent McGregor from getting ahead of him. That is Alexander buttoned the pocket with the aid of Bonsetter, for there seemed to be a desire to beat the favorite anyhow. So it was that they passed the quarter in this order: Alexander first, McGregor second, Bonsetter third, Hannis fourth, Monroe Chief fifth, Santa Claus sixth, and Wedgewood seventh. Alexander held his lead by less than a length at the quarter, and McGregor was still trying to regain what he had lost in position. Bonsetter held a good third place, but it was evident that nothing but an accident could give him any advantage over the two hot contestants ahead of him. Hannis had now drawn up steadily from fifth to fourth, and then fourth to third place, with every indication in his favor. But just when he had reached second place, and bade fair to hold it, he broke all up on the third quarter, and fell away in an instant from second to fifth place, just where he started. There was now little else than the contest for the lead, worth noticing. This however, was a very fascinating scene to witness. Alexander was honestly doing his level best, with the heavy track and a very large frame of his own against him. But McGregor was a little lighter on his feet, and it was evident that, inch by inch, he was getting the black horse at a disadvantage. There was no letting up at the front, and McGregor had to earn every inch he gained. He was about abreast with his opponent at the third quarter-post, and still going for the first place inside. Had Alexander hugged the pole the result could not have been other than what it was. But McGregor got the pole through this opening, and kept his nose only under the wire ahead of Alexander. Monroe Chief ran and got up from fifth to fourth place, that being the only noticeable change in the field. They went to the finish in this order: McGregor first, Alexander second, Wedgewood third, Monroe Chief fourth, Bonsetter fifth, Hannis sixth, and Santa Claus seventh. Time 2:18 1/4.

FOURTH HEAT.—Robert McGregor sold against all competitors at \$50 to \$11 before the horses were called up, and there were many takers for the field who could not get a bite at the fifty dollars. The horses started well together with a slight advantage for Alexander, who soon forged ahead and took the pole away from the favorite. Santa Claus trotted very swift for the first eighth, and succeeded in heading off McGregor and leading Alexander before the quarter pole was passed, and that point was reached in remarkable short time, Wedgewood and Bonsetter working hard to close up the gap between themselves and the leaders. Monroe Chief acted indifferently from the start, as though he was either tired or discouraged. They reached the quarter pole with Alexander ahead, Santa Claus second, McGregor third, Hannis fourth, Wedgewood fifth, Bonsetter sixth and Monroe Chief seventh. Between the quarter and the half Santa Claus trotted fast enough to make it very warm work for McGregor to keep the second place, while Alexander trotted beautifully and fast, keeping his lead of about two lengths. The other horses were badly huddled together, and Hannis did not pan out as well as was expected. Bonsetter, upon whom some had counted with hopes of at least second place, acted badly, and Wedgewood did not show himself as fast as was expected he would in the fourth heat. On they went to the half, where Alexander still led by a good length or more, Santa Claus hanging close to McGregor who had taken second place by a spur. The others followed in a bunch. When they neared the three-quarter pole McGregor went off his feet for a moment,

but Crawford pulled him down splendidly and he passed the three-quarter pole very close to Alexander, with Santa Claus a still closer third. The other horses kept well together except Bonsetter, who fell back as the others pulled out for home. McGregor and Alexander came into the stretch neck and neck and they were traveling with great speed. Santa Claus hung on well, and Hickok drove him with great care, while Wilson plied the bud to Alexander and made him fairly fly. Crawford also urged McGregor to his utmost and more, for he ran under the wire a length ahead of Alexander, Santa Claus a very close third, Hannis fourth, Wedgewood fifth, Monroe Chief sixth and Bonsetter seventh. The friends of the black stallion, with reluctance, repressed their feelings, for they were anxious to see the horse who finished under a run would not be put back for trying to steal the heat. The judges deliberated a long while and questioned the drivers of Alexander and McGregor regarding what they did and saw while going round. There was a vigorous kick on the part of McGregor's friends, and owner and driver, but the judges came to the conclusion that Alexander was entitled to the heat, and when they hung out his name, the hurrahs of the crowd more than numbered and effectually drowned out the hisses of those who had been staking their cash on McGregor. Alexander was comparatively fresh at the end, and Santa Claus was just in the zenith of his speed and spirits. The others, with the possible exception of Wedgewood, who did not travel fast enough to tire him, were pretty well broken up as they jogged to the tents for their twenty five minutes rest. Time 2:19 1/4.

FIFTH HEAT.—Odds of two to one were offered on McGregor against the field for the fifth heat, and the interest to see how he would acquit himself was intense, even among those whose money and wishes were with Alexander. They got away in good shape, with Alexander at the pole and McGregor a very close runner. Before they had gone forty rods, McGregor took the pole away from the black horse, and held it until the quarter pole, when Santa Claus came up with a terribly long stride and made a trio of fast trotting stallions, with all others in a bunch considerable space behind. In the middle of the second quarter, first Alexander and then Santa Claus overhauled McGregor and Hannis lapped him. The others kept well together, except Wedgewood, who had evidently got into too fast company. On they went past the half in a crowd, except Alexander, who kept the lead, and Wedgewood, who brought up the distant rear. At the first turn beyond the half there were five horses nearly abreast and all trotting fast. They kept their relative positions until they came to the stretch, when Alexander showed more than half a length the lead, with McGregor shaking off the crowd and Santa Claus coming the leader very hard. Alexander, however, hung on splendidly and kept increasing his pace, but Santa Claus increased his more, and passed Alexander 100 feet from the wire, passing under a neck ahead of Alexander, with McGregor third and close, Wedgewood fourth, Monroe Chief fifth and Hannis sixth. Bonsetter's driver, Wm. McCarty, when half way down the stretch, was seen flying in the air with the sulky on the horse's back. The frightened stallion ran along behind the other horses and was quickly caught. McCarty picked himself up, and to the astonishment of everybody (for it seemed as though he must be badly hurt), limped away to where the horse had been halted. The accident to Bonsetter was the result of a collision with Hannis' sulky, in which the only damage was that to Bonsetter. The winning of the race by Santa Claus was coming surprise to almost everybody except Hickok, who has abiding faith in the stallion when endurance and speed combined are required. Alexander tried hard to win the heat, and McGregor also, but the former was not expecting the California horse to do so well, and the latter had put in his best work in the previous heats.

SIXTH HEAT.—Only three horses remained to trot for the honors of the sixth mile. Those were Santa Claus, Alexander and McGregor. The others, none of whom had won a heat, were sent to the stables. At 7:05, o'clock p. m., when the judges rang the bell for the trotters to come out again, there was a pool of \$75 sold, with \$25 on Santa Claus, \$29 on McGregor and \$21 on Alexander. Betting was very lively, and was well kept down to have his tickets before he could find men decisive enough to take them, with the accompanying and apparently evenly balanced risks. But another pool of \$69 was sold, with Alexander at \$25, McGregor at \$24 and Santa Claus at \$20. Other and smaller pools, varying according to the whims of different buyers, were sold more rapidly. It was 7:15 o'clock in the evening before the three remaining contestants were called out upon the track for this the sixth, and, as everybody save the backers of Santa Claus hoped, the last heat of the race. They went away at the word, nicely abreast, and had not reached the first turn before Alexander skipped in fairly ahead of Santa Claus, robbing the latter of his pole position. McGregor was about to do something, when he went all off his feet and ran around the turn and back nearly to the quarter post. Then he held down to a trot by his driver, but still he had lost three or four lengths in position. Up to the back stretch they were trotting in one, two, three order and there was nothing close until after the half mile was passed, when McGregor seemed to be trying for second place with all his might and with fair prospect of getting it—and then it was he went off his feet again and fell away. On the third turn, Santa Claus began to show his staying qualities in an up hill race. He strode ahead after Alexander as though he meant business. Then he fell back a yard or two at the fourth turn, but gathered himself for a winning finish. He came up abreast with the heretofore steady and reliable black horse, and began struggling to lead him, when the latter (Alexander) made a bad break for the first time in the race. Then it was all up with him, for Santa Claus was going regardless of Christmas, and more as if he was a sort of Independence-day horse. By the length of his own neck the Kris Kringle of the day presented his backers with his second victorious hat, in favor of their purses and pools. Alexander couldn't possibly have won the heat after his first break, and came jumping and tearing under the wire "all broke up." For the benefit of those who wouldn't have known it anyhow, it may be added that McGregor was in the neighborhood of "three lengths too late" in getting to the wire. Time of winner 2:22.

SEVENTH HEAT.—Alexander was put in the field with McGregor, at \$15 against \$25 on Santa Claus in the heat. That was sure to decide the race, unless there should be a dead heat, which was almost impossible. They started splendidly together, and went fast for the first eighth, McGregor doing all he could to gain the lead, with Alexander and Santa Claus also working terribly hard. The hopes of the McGregories were unduly excited when the horse, by a spur, showed ahead of the others at the quarter, but he was allowed to be the leader only for a moment, when Alexander headed him, and a few moments later Santa Claus. Up from the

quarter pole to the half pole all three horses trotted fast, and McGregor and Santa Claus were neck-and-neck for thirty rods, while Alexander was leading them both more than a length by his immense long strides, which were beautiful to behold. With his hottest competitors pushing out their noses towards him with their utmost power, he neither grew excited nor seemed to need urging and Wilson merely had to let him go as he wanted to. Santa Claus and McGregor seemed to lose sight of the noble black stallion in their race with each other, and they swung into the stretch with their noses on a line and almost lapping Alexander. The black horse then seemed to realize that "Jimmy" wanted him to show his metal, and he did that very thing in a magnificent manner by fairly flying down the stretch. McGregor's driver put his whole energy into urging on the field favorite, but it proved unavailing, for the horse broke and Crawford let him run, apparently disgusted and disheartened. He ran in behind Alexander a couple of lengths, and Santa Claus was close behind them. The judges set the Kansas horse back to third place for running. Time 2:25 1/4.

ROCHESTER DRIVING PARK, July 4, 1881.—Stallion race; purse, \$10,000; divided, \$5,000, \$2,500, \$1,500, \$1,000. Gus Wilson, New York, blk. s. Alexander. 1 2 2 1 2 2 1 H. H. Gilman, Topeka, ch. s. Robert McGregor. 2 1 1 2 3 3 3 O. A. Hickok, San Francisco, br. s. Santa Claus. 5 4 7 3 1 1 2 J. E. Turner, Philadelphia, br. s. Hannis. 4 3 6 4 6 r o John Splan, Boston, br. s. Wedgewood. 7 7 3 5 4 r o W. H. McCarthy, Chicago, b. s. Bonsetter. 3 6 5 6 7 r o Wilson, Chicago, b. s. Monroe Chief. 6 5 4 7 5 r o Time—2:19, 2:19, 2:18 1/4, 2:19 1/4, 2:21, 2:23, 2:25 1/4.

With the splendid victory for Alexander, a victory won by the most honest trotting ever witnessed upon the Rochester track, his owner, W. G. France, Jr., and his driver, Wilson, may well be satisfied. He is only seven years old and has achieved a great triumph. With the result of the race, most of the old sports, who dropped their money on McGregor so steadily and so exclusively during the whole afternoon, are undoubtedly disgusted. It is the common remark that McGregor was the choice in the pool boxes of a combination that connived to make him the winner, and the manner in which the old betters laid their money on him, gave much color to the story. If such was the case, the combination was most effectually "busted," and the sporting fraternity from abroad are in about the same condition. Be that as it may, the race, in grand one—the grandest ever trotted in Rochester, and at present he is in better shape than any other horse I've got. I have no doubt that both horses can beat the best records.

THE WINNER. Alexander, black, is owned by W. C. France, of St. Louis, and is generally known and frequently described as France's Alexander. He was sired by Ben Patchen, out of a mare by Canada Jack, and retired last year with a record of 2:21 1/4, made in June a year ago at Milwaukee. This season Alexander has been kept busy, beginning with the Belmont Park meeting at Philadelphia, on May 24, when he won the 2:21 prize in three heats—2:20 1/4, 2:20, 2:20 1/4; at Beacon Park, on June 3, he won 2:20 prize in three heats, over a very close track, in 2:24 1/4, 2:23 1/4, 2:23 1/4; at Mytic the following week the 2:19 purse fell to him in three heats, time 2:26 1/4, 2:26, 2:26 1/4; and at Providence he secured the 2:19 purse, also in straight heats, time 2:25 1/4, 2:22 1/4, 2:25 1/4. Alexander's races at Boston and Providence were little criticisms of his best speed, for the weather was poor and the track heavy, while the calibre of his opponents was not of a high grade.

THE SECOND MONEY HORSE. Robert McGregor, chesnut, by Major Edsall out of Nancy Whitman, by American Star, is a horse whose reputation has been made this year. Beginning at Philadelphia in May, he won the second heat of the race won by Alexander, his time, 2:22, being the fastest in the race. At Detroit he won the stallion race in 2:23 1/4, 2:24, 2:24, beating Wedgewood, Monroe Chief, and Hannis, but at Jackson, the next week, he scored four seconds, the winner's time being very slow. At Saginaw, however, he came out in grand form, and took the stallion race in 2:19 1/4, 2:19 1/4, 2:19 1/4. At Toledo he easily won the 2:21 purse.

COTTON SEED MEAL. How to use cotton seed meal in feeding it to stock is a matter of no little importance. When fed too freely it may do much harm and therefore should be used intelligently. It is worth now about \$30 per ton, and is considered at that price, one of the most useful foods when used with judgment. Analyses show that a ton of cotton seed meal contains thirty-eight pounds of potash and fifty-six pounds of phosphoric acid with seventy-eight pounds of nitrogen. Being so rich in nitrogen and oil it should be used with food rich in starch, such as potatoes and roots. One pound of cotton seed meal is considered by some, equal to two pounds of corn meal. Thus it will be seen it is so rich that it must be fed only in small quantities. A southern writer says two pounds a day are quite enough for a cow that is milking; a calf should not have more than two to four ounces; pigs will not thrive on it at all, as it is too rich for them, except when given in small quantities mixed with bran slops, or cut roots. Horses do well on it, if given two pounds daily with corn meal, two pounds of it equal ten pounds of oats. But, if fed too abundantly, the bowels are made very constive and the kidneys are affected. This is doubtless on account of its highly nitrogenous nature, as the waste nitrogen is eliminated from the system through the kidneys, and they are too actively excited by very rich food. The next ill effect is an inflammatory condition of the system and in cows there is a danger of garget, and horses suffer from irritation of the skin, sore mouth, and hide-bound. It is as though a man were fed on extract of beef, rich pastry, and such food only. One pound of cotton seed meal mixed with half a peck of boiled potatoes mashed together, would make good food for a fattening pig, or a milking cow, but the pig should have corn or bran for the second daily feed. These facts should be kept in mind, as there is little doubt that more of this food will hereafter be used in this country than has been heretofore.—Prairie Farmer.

Getting It Out of Him. Last week, young Keepitup was out with a team all afternoon. When he drove into the stable, oh, but the man was mad. "Look at that boss," he yelled, "look at that boss! Ain't a dry hair on him, and he's high ready to drop. That's a pretty lookin' way to bring in a boss. Nice man you are, to let a good boss to!" Young Keepitup was fairly astounded. "Man alive," he yelled, picturing his amazement in his voice, "and what did you expect when I hired him? When a horse is costing me an even five dollars an hour, he's got to keep moving, you understand. When I'm paying more than eight cents per minute, I can't afford to let no horse lean up against a feed box while he figures out the oat crop of the United States for 1881. I did my level best to keep my whip arm warm, and then I couldn't get more than 34.25 a shot of him. I don't have the horse to rest him. Now if you had only charged fifteen cents an hour I would have had the horse fed every thirty minutes while I was out, and I would have rocked him to sleep in my arms, wrapped him up in blankets, and hauled him back to the stable myself. That is the difference you see, Mr. Silkeracker."

And he went away, while Mr. Silkeracker stood looking alternately at the money and the horse, thinking it over.

TO BEAT THE BEST RECORD.—Robert Bonner is confident that his trotters, Rarus and Edwin Forrest, can beat the best time on record. Mr. Bonner says: "If I can get Rarus and Edwin Forrest into a satisfactory condition, I may give an exhibition trot in August. I have not arranged details, but either the Prospect Park or Hartford track will probably be selected, as I do not consider the Fleetwood track fast enough. I think either Edwin Forrest or Rarus ought to beat 2:10, and the former driver of Rarus, Splan, thinks he can go in 2:08. Both horses have trotted in 2:13 1/4 on a three quarter track, which is considered by sporting men better than 2:10 1/4 on a mile track. You see, on a three-quarter track you go round a circle of twenty-three acres, while on a mile track you traverse a circle of forty-two acres. It is easy to understand that in the former case the turns are much more abrupt than in the latter. No half mile track can be as fast as a three quarter track, nor any three quarter track as fast as a mile track. A week ago, I drove Edwin Forrest to a top wagon, 356 pounds, in 2:22 1/4, and at present he is in better shape than any other horse I've got. I have no doubt that both horses can beat the best records."

The Shepherd. Edited by R. M. Bell, of Brighton, Massachusetts, to whom all matter relating to this department should be addressed.

The Price of Sheep. If wool continues to rise as it has for two weeks, sheep will advance in price accordingly. Two-thirds of the clip of 1881 has passed out of producer's hands already—a thing quite unusual up to date. While we were, with many others, blue over the situation a month ago, all seems changed for the better now, and from our little standpoint, we can see no cause of anxiety in the near future to sheep raisers. Don't knock the sheep in the head, nor give them away. If you buy, buy the best. If you sell, sell the poorest or none.

The Outlook for Wool. Since the murderous attack upon the president, the wool business has been quiet. Those manufacturers who had not bought, decided to wait, and some who had placed orders for wool to arrive, promptly cancelled the same. The confidence of holders is strong, and while prices are steady and firm, the advancing tendency for the time is checked, and no weakening of values is looked for. There is no doubt but the supply of domestic wool will be inadequate for the wants of the machinery until the next clip, without extensive importations, and while this deficiency may not be apparent for months to come, and while a prolonged dull market may temporarily lower prices—the uncertainty of the recovery of the president—we believe wool must eventually command somewhat better prices than rates now prevailing.

JUSTICE BATEMAN & CO. Philadelphia, Pa., July 11.

WOOLEN GOODS.—There is a steady, legitimate demand for wooleens, including cassimeres, suitings, worsted coatings, overcoatings, cloakings, repellents, satinetts, Kentucky jeans, doeskins, flannels, blankets, hosiery, underwear and fancy knit wooleens. Prices are firm with the tendency upward rather than downward. No actual change in quotations has been made, but on certain makes of medium all-wool cassimeres an advance is in contemplation.

The Illinois Wool Growers' Association, with characteristic enterprise and liberality, has offered three pure silver goblets, of \$50 value each, to the breeders of fine-wool, middle-wool, and long-wool sheep, the show to be held at Peoria, during the State Fair, in September next. All competing animals must have been bred by the exhibitor, and continue his property at the time of exhibition. They will be shown in pens, viz: Fine wools, 16 animals—that is to say—1 ram, any age; 5 ewes, two years old; 5 ewes, one year old; 5 ewes, under one year old. Middle and long wools, 10 animals—that is to say—1 ram, any age; 3 ewes, two years old; 3 ewes, one year old; 3 ewes, under one year old. The exhibition will be conducted under strict rules, which will be impartially enforced. As the competition is open to all, and no entry fee will be exacted, while the management is in the hands of men whose standing is a guaranty that merit will have its full recognition, this step forward should have a hearty response from

sheep-breeding centres in the country. Information can be had by addressing V. P. Richmond, Secretary, Moro, Illinois, or the Secretary of the State Board of Agriculture, Springfield, Illinois.—National Live Stock Journal.

Philadelphia Wool Market. The wool market has taken a decided upward turn and prices have advanced 5c to 7c on some grades. It was generally conceded that values were too low and that prices would stiffen somewhat, but we do not think any one anticipated such a rapid advance. Medium and fine wools are the most desirable and very scarce. The great firmness and good demand in the eastern markets, together with the excitement in the west, would indicate still higher prices here; fine and medium wools will evidently reach 48c to 52c. We have never seen a more favorable time for western holders to make a profit on their wools. GREGG BROS. Philadelphia, Pa., June 24.

London Colonial Wool Sales. LONDON, ENG., June 21.—At the wool sales to-day 10,600 bales were sold, chiefly New South Wales, Victoria and New Zealand. The sales were steady and prices unchanged. LONDON, June 23.—The wool sales to-day 9,700 bales were sold, chiefly Sydney, New Zealand, Port Phillip and Cape; prices were very firm. The present series of sales will close on July 1st, and the next series will commence August 23d.

LONDON, June 24.—The colonial sales continue to manifest not only considerable animation, but great strength. Australian wool is firmer, superior being up to 15 1/2d or 95c for the scoured pound laid down in New York. Domestic wools, such as Irish Hoggets and Shropshire, are firm at 12 1/2d @ 15d, and farmers are holding for higher prices. Carpet wools are unchanged.

Sheep and Coddling Moth.

We have described briefly on former occasions the two remedies for the coddling moth which are coming into extensive use, namely, the application of paper bands, and the feeding of sheep and swine under the trees. A distinct description of the former remedy was published on page 310. The continued inquiries which are made on the subject induce us to give the result of several successful experiments in turning in sheep, which, on the whole, appears to be more effective than the paper bands, with less labor, but bands may be sometimes used where sheep cannot have the run of the trees. Swine answer well, but do not often exist in herds large enough for extensive orchards, and besides they are less vigilant than sheep in picking up the droppings of infested fruit.

It is now many years since our attention was first called to the use of sheep in clearing orchards of the coddling moth. More recently, as the remedy has been adopted by skillful orchardists, many examples of success have come to our knowledge. One of the most efficiently managed is the small orchard of Allen Landon of Cayuga county, whose crop of fair fruit, which has for many years been almost free from the coddling worm, has sold for an average of over one hundred dollars for each acre of his orchard, and is in strong contrast with many of the infested crops in the same region. The trees being over twenty years old, no crop is attempted beneath their shade, and the light grass is kept grazed by sheep. The ground is top-dressed biennially, and the droppings of the sheep add to the fertility. The sheep are turned in as soon as the grass affords pasturage, and are continued till near the end of summer. In number they average one sheep to two trees, and as the grass and droppings are insufficient feed, the deficiency is made up with grain in troughs. The sheep never attack the bark of these old trees, but younger trees might not escape. The crops in the extensive orchards of the late Oliver Chapin of Ontario county, were kept almost entirely free from the coddling worm with sheep, at the same time that some adjoining orchards to which this cure was not given, were nearly ruined by insects. J. S. Woodward of Niagara county keeps his thirty-acre apple orchard free from the coddling worms by giving it to his 200 sheep and 40 swine during the entire season, and into September. Although there are five trees to each animal, they make thorough work, and as the loaded branches bend down within their reach, the few hundred bushels of apples which they reach are more than repaid by their constant presence. The trees are fourteen years old, and as they become larger they may require a larger number of animals. To protect the bark from any possible attack, the trunks are washed with a mixture of lime-wash, common and whale-oil soap, and sheep dung. The sheep are fed grain in troughs in addition to the grass and droppings. The success which has resulted from this management, together with the top-dressings which the land receives, may be judged from the fact that in 1879 the crop from the thirty acres sold for more than \$5,000.

We have not met with any instance of the failure of this remedy, when it has been efficiently applied. Turning in the sheep for a single season will not answer the purpose; the remedy must be continued year after year. Turning them in occasionally, or on and off, will be useless, and always fails.—Country Gentleman.

All fine wools assume the form of a spiral curve—the finer the fibre the greater the number of curves in a given length, and the number of these curves has much to do with the feeding properties of wool. They form a good test also of the purity of blood; and a safe guide in the selection of breeding sheep. If the farmers understood this, the villainous practice of palming off, at high prices, grade sheep for poor blood, would not prove so profitable a speculation. It requires but a little practice to become acquainted with this in such a manner that any one can, by the examination of the wool, tell a grade from a pure blood.

An incorporated company for sheep breeding has been formed in south Missouri, one hundred and fifty miles from St. Louis. They propose to locate 30,000 acres of land on the side of the Ozark mountains, and to start with 4,000 sheep, fenced in at a less cost than herdsmen can be employed. They expect to bring the land under cultivation at an early day, and to graze in blue and tame grass instead of bunch grass, and to provide shelter and winter feed for the flocks, and other improvements when needed. This is more sensible than the Colorado system, which relies on pasturing or starvation in winter.

The Home Circle.

JOHN OF TOURS.

(Old French.)

John of T. was back with peace,
But he comes home ill at ease.
"Good-morrow, mother!" "Good-morrow,
son!"
"Your wife has borne you a little one."
"G's, now, mother, go before,
Make me a bed upon the floor."
Very low your feet must fall
That my wife hear not at all.
As it were the midnight oil,
John of T. gave up his soul.
"Tell me now, my mother, my dear,
What's the crying that I hear?"
"Daughter, the children are awake,
Crying with their teeth that ache."
"Tell me, though my mother, my dear,
What's that knocking that I hear?"
"Daughter, it's the carpenter
Mending the planks up the stair."
"Tell me too, my mother, my dear,
What's the singing that I hear?"
"Daughter, it's the priests in rows
Going round about our house."
"Tell me, then, my mother, my dear,
What's the dress that I should wear?"
"Daughter, any red or blue,
But the black is most in use."
"Nay, but say, my mother, my dear,
Why do you all weeping here?"
"Oh, the truth it must be said—
It's that John of Tours is dead."
"Mother, let the sexton k'ow
That two graves must be for two;
For you must shut the baby there."

Letter from Orphan Boy.

DEAR HOME CIRCLE FRIENDS: I have just received my RURAL WORLD, and have looked over the Home Circle, which department pleases me very much.

Nina, I was very sorry to hear of your dislike for boys. You should think well before you make such statements, as the boys, you know, will soon be men. You have your part to perform in molding their characters. How often we hear men declare, "I owe all I am, or ever expect to be, to my mother, wife or sister." If women only knew what a few kind words from them would accomplish in the way of good, much more good would be done. A kind word or look will always accomplish more than a world of scolding. I hope, Nina, you were only a little worried when you made the remark, for to judge from your letters, one would think you to be a very good and kind hearted young lady. I think every boy and girl should determine to be accurate. In working, do everything just right. In learning your lessons, try and get the exact meaning. In speaking, try and state the real truth. How much trouble and vexation would be spared your friends and parents, if every boy and girl would just say, "I will try from now to the end of my life to be more accurate." I account for my own success, so far as I have been successful in this world, to my determination to perform my allotted work as near correctly as possible. Accuracy will gain us friends and confidence. Carelessness will bring just the opposite. So dear boys and girls, think well before you make a choice. There are many things that tend to make a noble character. Place accuracy high in this list.

Lily of the Valley, from the beginning of your letter of July 7th, you seem to be in trouble; but we must all learn that through woe we are taught to reflect, and we gather the honey of earthly wisdom, not from flowers, but from thorns.

Lloyd Guyot, I admire your letters very much. I think the RURAL WORLD can boast of the best and most cheerful Home Circle to be found anywhere.

Will some kind friend please inform me the best books for a boy to read who has never had any of the writings of our best authors? I wish to get them soon, but don't know what is best for me. Hoping to hear from some of you through the Home Circle, and see many of your bright and interesting letters, I remain, yours truly,

ORPHAN BOY.

Florence Nightingale.

Dear friends of the Home Circle, let me relate to you an instance of "Florence Nightingale," and show you the heroism of the greatest lady that lived. When the Crimean war was in progress there was wafted westward across the continent to England, a wail of woe and distress, such as was never before heard by any civilized people. It came from sick and wounded soldiers, as they lay uncared for on the battle-field. There were no hospitals, no hospital supplies, no nurses, and the poor soldiers were dying from sheer and cruel neglect. England was alarmed at the ranks of her army were melting away by the fearful mortality among her troops. The sad wail, the moans of the sick and dying, were heard by a highly accomplished young lady at her home of luxury and refinement, surrounded with every comfort wealth could command, or loving friends could devise. Instantly she responded to the call of the suffering and dying soldiers on the field of battle. Enlisting two hundred assistants, she bade her happy home and loving friends adieu, and with the utmost alacrity hurried to the field of carnage and death, where shot and shell had done their cruel work. At the sight of the awful scenes in the "valley of death" she faltered not. The ghastly dead, the mangled and shattered wrecks of the human form, made so by the death-dealing missiles of the enemy, had no terrors for her, when duty and humanity called. The terrible suffering of the sick and wounded, the agonizing cries of those who had passed beyond the reach of human aid, brought to her view scenes never to be forgotten. The sickening stench of decomposing bodies only added to the horrors of the situation. It was enough to appal the stoutest heart and to destroy nerves of iron. She went among the dead and the living; kneeling down

amid corpses to minister to some poor soldier who had fallen beside them, with all the tenderness of a mother's love or a sister's devotion. The rough dragoon or the drummer boy, some mother's darling, received alike her utmost care and attention. Hundreds, thousands, lived to bless the name of Florence Nightingale. No monument is needed to immortalize her name. Her memory will be held in grateful remembrance long after the name of Napoleon shall have been forgotten. Her labors were not passed by unrewarded. A gift of fifty thousand pounds was made to her as a slight testimonial of her invaluable services. But her last noble act was the crowning glory of a beautiful life. She donated the entire sum given her to the founding of an institution for the education and training of nurses. She still lives, an invalid. She sacrificed every comfort, a delightful home and its enjoyments, her health and all the pleasures of life, that others might live, rescued from the very jaws of death on the battle-fields of Inkermann and Balaklava. Look at her life-work and compare it with Napoleon's. I remain yours,

Vernon Co., July 5, 1881. HERBERT.

Eureka Springs.

COL. COLMAN: Some months since, I spoke through your columns disparagingly of Eureka Springs. My information was founded on the testimony of Judge F.—a prominent St. Louisian who made an unsatisfactory visit thereto. Please insert the following article, written by a relative of mine, the political editor of the St. Louis Republican, who is at present sojourning at Eureka Springs, interest of health, and mental relaxation. D. M. M., combines literary ability with integrity of character, and what he says can be strictly relied upon. His thoughts may prove interesting and important to the many health-seekers of your journal. LENA.

St. Louis Co., Mo.

REMARKS.—The article sent would occupy about three columns of the RURAL WORLD, and we cannot devote the space to its publication. It speaks very favorably of the Springs, and confirms the good reports we have heretofore published in regard to the benefits to be derived by partaking of the waters.

Letter from Calcium Fleet.

Dear friends of the Home Circle, at the risk of incurring the displeasure of the more profound thinkers and elaborate essayists who contribute to your columns, and whose experience and frequent visits to the press have won for them a warm place in the hearts of the people and a permanent position in the world of letters as polished *littérateurs*, a green country boy from the wilds of Wisconsin, herewith audaciously, and perhaps impolitely, steps in to make one of your happy band for a little while. I am sure I shall enjoy your company, as I ever have while a silent reader, for you are all so jolly, so good natured, and so whole-souled withal. And now if the lightning editor does not unceremoniously kick me out, I may come again at some future time. If he does see fit to excommunicate me, of course the Home Circle will never know the sorrow of my fate, and cannot weep for me the healing tears of sympathy.

I have not seen the reply to Walnut who argued the speedy downfall of our glorious republic. Cannot some of the many able contributors to the Home Circle answer his argument and present others as forcible, or more so, on the negative of this question? I know it can be done, and would gladly do so myself had I the ability.

I like Nina real well, that is of course, I mean her writings.

I have seen in a poem somewhere the lines:

Nina, of the golden hair,
Nina, sweet, surpassing fair.

Wonder if this was the Nina whose writing we so admire?

Gillie Lee is full of vivacity and brilliant humor, and what is more, as plucky as any of her sisters dare be. Now, girls, a fair start and long life, peace, happiness and prosperity, to the one who is so lucky as to capture that fair haired minister, the Rev. Paulus. It is sincerely hoped that the disappointed ones, whoever they may be, will find an abundance of solid comfort in those exquisitely beautiful lines:

"There are fishes in the sea
That have not been caught;
And a fig for 'em."

Ben pardon, Gillie, but I didn't think of any other lines that seemed appropriate, and if you are angry with me just seize that wonderful instrument of power, the pen and give me "particulars."

I could not begin to mention all my favorites of the Home Circle, for there are so many, and it is no easy task to tell which is the most pleasant or instructive writer. There is, to me, nothing more enjoyable than friendly, social intercourse. It lightens the burdens of life; it banishes sorrow from the aching heart; it infuses a tender feeling of sympathy into the soul of mankind; it always makes one happier to know that others are interested in his welfare. Among the sweetest of earthly joys are those we feel in making others happy, and this, dear friends, you have been doing from week to week, through the kind permission of Col. Colman.

And right here a thought strikes me of some things we may well remember in our daily lives at home. Are there any of our Circle who do not enjoy the company, the merry, innocent laughter, the artless prattle, the playful antics, and the natural, frolic, loving impulsiveness of little children? If there are any such, they merit and surely have my earnest sympathy. Permit a quotation from the Rev. Houghton's splendid little volume of poems:

"Of the prancing and the dancing,
Of the laughter ringing wild
Of the shouting and the shouting
Of a happy-hearted child!
There's a magic music in it
Which you never heard before;
Try it, neighbor, for a minute—
Try a frolic on the floor."

There are none so easily made happy as the little ones, and none who will more gratefully remember a kindness. Smiles and kind words, then, for the little folks; and, moreover, an occasional "frolic on the floor" will do them a wonderful amount of good and harm you not.

CALCIUM FLEET.
Vernon Co., Wisconsin.

Mean Men.

Not long since, while I had stopped to admire a lot of flowers which were offered for sale on the sidewalk, a well-to-do business man and his wife were passing by. The flowers caught her eye, and with a brightening look she asked her husband to buy some. But he cut her off with the words, "we need no flowers, it would be money thrown away." An expression of sadness and disappointment overspread the woman's face, and with a wistful parting glance at the lovely flowers she passed on. I am acquainted with both, and know that his wife not only performs her household duties, but also assists in the store, lending a helping hand wherever she can. I was therefore not a little surprised to see her denied the pleasure which the possession of a few flowers, costing perhaps a dollar, would have brought, and my mental comments on the man's action were not very complimentary. There are model wives who slave the year round for their lord and master, working early and late, encouraging in every possible way, yet when they ask for a few dollars to replace their shabby hat, or old dress, for a new one, they are met with growls, and often scarcely get half they ask for, though their expenses for wearing apparel and luxuries do not amount to one-half of what their husbands expend for similar wants. Others, again, especially the wives of business men in cities, are kept at home like prisoners, seeing but little congenial company, yet their husbands never so much as think of taking them out for a drive, or to an entertainment.

Now this is downright selfishness and meanness, and proves such men to be unjust and shortsighted, or they would certainly stop to consider that a wife has a right to spend as much money for the gratification of her tastes as the husband does. They would also take into consideration that a woman is panned up, as it were, most of her time, with but little to break the monotony of her every-day life. The husband meets with enough diversion to prevent his life from being a monotonous one. He takes his daily exercise going and coming from his place of business, continually meeting with friends and acquaintances, with whom he exchanges pleasant chats, or talks politics. He finds time to read papers, and indulges in a smoke or a drink whenever he feels like it, and often spends more for the latter luxuries than he denies his wife.

There is nothing so wearing on the health as continued, monotonous round of household duties, and many a long spell of sickness, and large doctor bills could have been avoided, by granting the wife's request, to take her out for an occasional drive into the country to breathe the pure atmosphere, pluck wild flowers, and listen to the soft tinkling of distant bells, or the twittering of birds in the bushy near by, while resting in the shadow of some grand old monarch of the forest, and the granting of a reasonable request for the gratification of a wife's tastes for flowers, or other things, ministering to her pleasure, would be repaid tenfold by her, in many ways. A woman's lot at best is a hard one, and while their work is often as tiresome as a man's, it is more often what is worse, more wearing on the system. I know of many cases where men with the best of wives, neglect them to an extent which is surprising, and often deny them a reasonable request, when they know that it would have given much pleasure. How men possessing such wives can be so narrow-minded and mean, I can't for the life of me see.

P.S. In a late RURAL WORLD one speaks of another writer and I am identical, to which I will say that I wear "coat sleeves," but I never sail under false colors.

Letter From Lloyd Guyot.

So Don Juan is an editor. Oh, my! Paulus, don't you see how we have inadvertently blasted our prospects forever, by assuming the role of critic over this city editor? And if he had not told us that he was editing a daily paper, we never would have had the slightest suspicion of it, would we? Much obliged, Don, for this valuable information. Your illustration was good. You were the ragged writer that entered the arena at first, but when you threw off the rags and discovered yourself to the Circle a full-fledged editor, capable of writing prize essays on egotism, and giving every body good wholesome advice about the way they should write, why, as a matter of course, the audience—but say, Don, how about that "uncontrollable applause?" The illustration is very appropriate with that exception, but I suspect the Circle will discover your merit after awhile, and then do the editor justice. You advise us all to be natural in our writing. Was the style which you adopted at the beginning of your correspondence to the RURAL, a natural one? If so, I advise you, for the sake of ease to return to it. If it was not natural for you to use such language, you violate the very rule you lay down for others. However, your "position" as editor, may license you to do anything. To be honest, Don, I never could be wise enough to be an editor, and such an editor as you. I had a big talk with Bon Ami, and together we read your letter. He sympathized very much with me, he said, for getting in the toils of a newspaper man, and fairly danced (you know he is not opposed to the art) for joy, that he had escaped.

Do you insist on my telling what I meant by "methodical foolishness?" The explanation is easily made.

Now as to writing that essay on egotism, I think it unnecessary for you to have two essays on the same subject. Yours in the RURAL of June 10th is the best one I ever saw, inasmuch as it portrays the most consummate egotist in Kansas. Bon Ami and myself, don't feel ourselves competent to match you in a literary struggle of this character, hence you must not feel disappointed if we should be quiescent. Study your own article carefully, and you may be able in time to eradicate your egotism, without the assistance of anyone.

Miss Ted, your letter of the 16th inst., was "read with pleasure." I am very glad, however, that I said nothing about Homer. Try, visit us again. You write a nice letter.

Visitor, please explain what is meant by this expression: "Sound and sense are as desirable antipodes on paper as elsewhere." It's too gigantic for me.

Tyro asks the question, "Can the actor be a moral man, according to the present state of the stage?" In my estimation, he can. According to the definition of "morality," as given by Webster, I can see nothing in it incompatible with the actor's profession. Of course there are different grades of actors, but the class found in our best theaters is the one by which we are to judge. Webster says that to be immoral pertains to practice or manners in reference to right and wrong; virtuous; just; probable.

It is true that an actor is not generally considered suitable for membership in the church, but it is equally clear that something more than morality is necessary for such an admission. An infidel may be moral from the above definition; so can an actor.

LLOYD GUYOT.

Gainesville, Texas, June 19

Letter from Bon Ami.

DEAR HOME CIRCLE: We have been again favored with a letter from our ancient friend, Don Juan. No longer is he the ignorant writer of offensive slang, but is now the highly cultured editor of a daily newspaper. This is no theory of ours; Don Juan himself is our authority for the statement. As the drunken man who stumbles into the ring suddenly rushes from one extreme to another, so Don Juan transforms himself into the most brilliant contributor of the circle.

Ariosto tells a pretty story of a fairy who, by some mysterious law of her nature was condemned to appear at certain seasons in the form of a foul and poisonous snake. Those who injured her during the period of her disguise were forever excluded from participation in the blessings she bestowed. But to those who, in spite of her loathsome aspect, pitied and protected her, she afterwards revealed herself in the beautiful and celestial form natural to her, accompanied their steps, granted all their wishes, filled their houses with wealth, made them happy in love and victorious in war.

So we presume that Don Juan will take the same course as did the fairy. To those who spoke kindly of him during the period of his disguise he will be their guardian angel. Certainly those who admired him then will never cease to praise him since he has revealed himself to them in all his beauty and his glory! But those who treated him ill need not expect to escape his withering criticism. Don Juan will no doubt deal out speedily punishment to all those who do not acknowledge that he is the peer of any writer of this century. Although we tremble to advise a person of such stupendous intellect, yet we submit that if Don Juan wishes to slay a thousand of his adversaries, he could more easily accomplish his purpose by using his jaw-bone instead of his pen. We remember one case in which a man was very successful fighting his enemies with a jaw-bone, and we doubt not that Don Juan might be benefited by repeating the experiment.

Visitor, we hope we shall have the pleasure of your company often. We like your letter, but we are compelled to dissent from your definition of criticism. You think criticism is merely one's opinion colored more or less by sympathy or enmity. Most of the rules of criticism are founded on sense. We shall illustrate this by referring to two of your expressions. You say, "Sound and sense are as desirable antipodes on paper as elsewhere," and generally indicate to some extent the author's ability. First we wish to ask if this is your opinion, or is it a truth. If this statement be merely your opinion, it is a truth that holds good thus far; if it be a truth then your definition is faulty. We assert next that you have violated what the rhetoricians call propriety, and this is not simply our opinion, but it would be regarded as a fact by every student of the English language. Unquestionably you want to express the same idea with that of Pope:

"'Tis not enough no harshness gives offense,
The sound must seem an echo to the sense."
But when you say that sound and sense should be antipodes, you say quite a different thing. When, further on in your article, you say, "I confess to a fondness of the dance," we might appropriately ask if the "fondness" pardoned your sins. It is not simply our opinion that a change should be made, but sense would dictate a different wording of the sentence.

Some time ago we wrote an article on Prof. Fowler. We wish to say that our mind has somewhat changed. Then we confined ourselves strictly to the information we had received. We have always believed that it were better to speak too gently than to speak too harshly of a man, yet justice would have compelled us to be much severer in our criticism of the unique professor. Leading divines have said that his conduct has been so immoral of late years as to demand the intervention of the law. But we shall say nothing more about him at present. BON AMI.

On the Road.

There is no place like home, though there are a good many places more desirable, should that home be located within that radius where old Sol takes special pleasure in making things hot, generally, as he has done of late—at least so thought the writer, who, having exhausted all known methods of cooling off, was tempted to try the luxury of a Pullman car that would take him anywhere at this par boiled condition to the quickest get-at-able place, where sleep was a possibility and life worth living for.

On making some inquiry as to the location of this much to be desired place, I came across the sleek and well-fed Wabash ticket office man, who in the words of the immortal Horace said, "Go north young man, and don't you forget it." Then, taking off his coat, he lay himself out on the cool breezes to be had in Wisconsin, if I would go by his line. His eloquence carried me right away, and made a convert, so we smiled and parted—I going home to pack, while he went in search of another who wanted cooling off via the Wabash R.R.

That night the cars on his line, carried me off at the rate of thirty miles per hour of which I knew but little, as the luxury of a rock me to sleep, mother, kind of motion of the sleeper, made me forget all about thermometers and that other world, where it is supposed they burst. Anyway during the entire journey I slept the sleep of the righteous until we neared Chicago, where the air seemed laden with perfumes more suggestive of agriculture than city culture, which no doubt was the cause of the last half hour of my sleep being disturbed by dreams on the best method of making bone fertilizers, which problem was not solved when the porter poked me up, whereupon I rose and made inquiry as to the track running so close to the fertilizing factories, when I was informed that the perfume we complained of came from the Chicago river, which acts as open sewer to drain the city of its refuse.

It was curious to note the effect the odor had on different passengers. If he was a Chicago man, he took to the smell like a fish takes to water, he sniffed and sniffed, and no doubt had happy remembrances of home; but if the passenger's were from any other city, they show that their remembrances were not so happy, as they made free use of their handkerchiefs. A St. Louis life insurance man was on board, and as soon as he could purchase a morning paper, he instinctively turned to the death reports to see how many had succumbed to the smell the day before.

One of the curious notes of travel, was the fact that nearly every lady on the cars had one or more children; and the conductor, who was a very nice man, told me that at this season of the year, it is the exception to have a lady passenger that has no child. I did not know it ran in seasons, but his remark supplied a theme of speculation that went to show life was but a fleeting show for our delusion given.

Having some three hours to wait at the depot before the train on the Chicago, Milwaukee & St. Paul R. R. started, we took a walk round the city; but what we saw or heard, I need not here report, for it would be a difficult task to say anything new of Chicago, as it has been blown both up and down continuously ever since the first mud streets were staked out. Blowing, that bringeth benefit to the blower, is an art that but few acquire in other cities; but here in Chicago, it is second nature, the benefits are manifold of which the native or naturalized citizen fully appreciates. In fact, wind has made the city, and wind sustains it. The free exercise of the lungs has made the bellows of the natives the strongest in the world, and as a consequence, there are very few deaths by consumption in their midst, though this lacking is fully made up the many deaths recorded as a result of the consumption of the river water, which is more effectual in its work than the noted Jersey lightning. The conscientious health officer, Dr. DeWolf, published a card at the opening of the summer season, advising people not to drink the water; yet because it's Chicago water, the native does not cease to drink until the undertaker prepares to present a bill, when it is too late to amend. There's more wind to the square inch in this city than in any other part of creation. Go on Chicago, or into any one of the many bucketshops when in full blast, and you'll hear more noise, see more on the gush, and meet more unjacketed lunatics, than Wall street ever produced, even when the whole caboodle went crazy on black Friday, and then they say, that's biz.

During our short stay we called on one merchant (a General), who, during our stay, called in a bootblack to do a shine. The little arab was evidently a green hand and did his work slow, seeing which, the General jumped up, paid the little fellow his five cents; then went to one corner of his office and cleaned his boots himself, and when he had finished, he set himself down to read his paper.

Of course I was willing to call this Chicago, but not biz, as outsiders understand the word, for generally mankind does not pay for work being done, and then do it oneself, unless it be on extraordinary occasions, and certainly this reported incident does not come under this heading.

Any one who desires to see the difference between a combination of rush and gush, should go to Chicago, where

they can find a superabundance of such a mixture, in every one from the city fathers, down to the little arab who cleans your boots for five cents.

Our time for sight-seeing drawing to a close, we wended our way to the depot, where we took the cars for Milwaukee, thence on to the lake region of Wisconsin. Where we went, and what we saw, will be recorded in our next. Till then, adieu.

J. W. S.

Some time has elapsed since last I thrust myself upon your notice, and I feel gratified that I have been welcomed in your cherished circle. I wish to ask the opinion of the members in regard to a question put to me by a dear friend. It is this: when a lady and gentleman have been carrying on a friendly correspondence, and one of the party should tire, what would be the proper way to cease the correspondence? Should he or she make some kind of an excuse, or stop short without any explanation? Hoping some one will be kind enough to grant the favor of considering this and advising my friend I am your well wisher.

Professional Authorship.

First of all, it will be well to disabuse women in general of their erroneous ideas concerning a literary career. A woman must not expect to find any play when she adopts literature for a profession. A practical writer leads a life of bona fide drudgery. She may, now and then, find her pet poems or finely written stories or essays accepted and paid for; but if she would make an actual living at the business, she must devote herself to it just as she would to dress-making or dish-washing. Amateur writers only possess the inestimable privilege of waiting until they are inspired before they write. The professional writer must compel the inspiration or write without it. A woman who writes for a living must hold herself in readiness to write at any time and at all times. She must be ready to write upon any subject and in any style. She must send a poem by return mail if required, write up a whole geographical division without previous knowledge of it, and with nothing but a guide-book and a dictionary of dates for reference; and yet have her article interesting, and read as if unlimited information was withheld solely for want of space. If she be a reporter, she must be able to write on the wing, and in the midst of crowds and confusion which would bewilder the intelligence of any ordinary man or woman. If she be a correspondent, she must be at her pen headache or no headache, when her more favored companions are resting from the fatigues of journeying or sight-seeing. She cannot afford to be either worried or ill until after the inevitable letter has been written and posted. The woman writer must have more knowledge than usual concerning her fellowmen and women. She must be more or less informed on all the subjects of the day. She must remember that this is a wise world, and that it is ready to pitilessly ridicule any ignorance which she may unwittingly display. A woman who knows nothing of science, art, theology, political economy, history, social reform, politics and all the rest of important subjects which are monopolizing the thoughts of intelligent minds of the age, has no business to put her pen to paper, since these subjects are brought down to such a degree of practicality that we can express our opinion on apparently the most indifferent topic that is not nearly related to some one of these.—Chicago Inter-Ocean.

Fish Culture.

Some years ago I conceived the idea of raising my own fish by the construction of an artificial pond. Near my house several springs broke out in the head of a small hollow, surrounded on three sides by small ridges or high ground. All I had to do to collect a fine body of water, was to build a levee or embankment of dirt from one hill to the other, which I did, about eight feet high, twelve feet at the base, sloping to eight at the top, taking the dirt from the inside where I designed my pond, for the levee. This gave me a body of water covering some two acres of ground, with a depth of from two to eight feet deep. To prevent my pond from filling up, I cut a ditch around it on the hillside to carry off all the wash water from rainfalls.

The next thing was to stock my pond with choice game fish. This was easily accomplished with a net in a small lake four miles distant—such as white perch and black bass, both very choice game fish. I now have my pond well stocked with these varieties and the common perch that inhabits almost all the waters. With the hook and line I can, in a very short space of time, catch all the fish I want any day, and can have them on my table every day if I want them.

Any farmer that has springs or running brooks on his farm, can raise all the fish he wants for his own table, and many more, at little expense or trouble by the construction of artificial ponds. Game fish, such as I have mentioned, and trout, require pure water to do well; other kinds, such as the different species of catfish, buffalo and carp do well in stagnant waters, if in sufficient quantity.

There is no healthier diet for man than game fish, and nothing easier obtained, and with very little expense. Why do not our farmers then avail themselves of this wholesome and fine diet, much easier raised than hogs or sheep, and greatly to be preferred as a health diet? Nothing breeds so rapidly as fish, and the danger is your water will get overstocked. The day is not far distant when fish will be raised by the millions all over the country, and the farmers will find it cheaper and healthier meat than beef or pork.—A. Harris, in Home and Farm.

He loitered at the festival,
A goblet in his fist,
A wishy washy fluid brimmed
The marge his lips kissed.
Quoth he, "I wish that I could get
A pair of trousers made
For summer wear as thin as this
Consumptive lemonade."
—Yonkers Gazette.

send free to his fellow sufferers. Address
45-59 J. H. REEVES, 43 Chatham st., N. Y.

The Tobacco Plant.

Weekly Tobacco Report.

Owing to the excessive hot weather which has had a paralyzing effect upon all branches of trade, we have a light business to report.

The market however ruled quite firm, and some special styles showed more strength. No change upon dark grades lugs and leaf. Colory Callaway Co. smoking lugs and filley leaf were in better request, and such styles being very scarce will likely continue in good demand the balance of the season.

The offerings of Burleys were light. The following from Benton Co., Ark. showed some excellent quality being smooth, good color and very flavy, ranging from common second to good leaf and brought \$800, 1000, 625, 900, 880, 1475, 1500 and 1325, afterwards 1500 was bid upon 3 best and also 1275 for the lot of 9 hds. which was refused.

Our advices from the crop of our state is much to our regret for encouraging, as the season for the past few weeks has been highly unfavorable and planters are becoming much discouraged. When they should take extra pains, cultivate well and rely upon seasons becoming more favorable later on.

J. N. CROUCH.

Manager Peper Tobacco Warehouse.

Worming and Suckering.

It is better not to plant a crop than to neglect to keep down both worms and suckers. The crop is worthless if either the one or the other be not faithfully done. The horn worm is the larva of the hawk moth, which appears first about May, and a second crop appears in a few weeks after. Each female moth lays, undisturbed, some 200 eggs. It will be seen that it is better to devise some means for its destruction than to wait and have to watch the 200 worms.

There are several ways of killing the moth. Some are using Griffith's trap, by which they are attracted by the light and flying into the flame are burned. Others depend upon poisoning by injecting colbat syrup in the blossoms of the Jimson weed at dusk. Still others are trying the colbat in a patent artificial Jimson blossom.

Another way is to set a coal oil lamp on a stand in a tub or large pan of water, with a little oil of some kind floating on the top. The moth flies to the light and falls into the oil, which is fatal to it. There is no question of the good to be done by moth destruction if all tobacco growers would engage in it systematically. But a large proportion of planters do not try to catch the moth and depend upon worming exclusively. This must be well looked to at the proper season; worm-eaten tobacco brings trash prices.

The sucker, if allowed to grow, takes the strength of the plant, and the leaf is light narrow and chaffy. Suckering is a tedious but necessary work, and must be done well and before the shoot gets too long. It grows rapidly, and many are caught laboring under the impression that they can get over the field in time. It is better always in advance of the worming and suckering season to engage extra help. It is believed that the quantity of worms will be less this year than last; but of one thing we may be sure, there will be enough to keep all hands busy to keep them off. There are no special directions to give as to the manner of doing this part of the work. Most any hand can do it directly. He must exercise patience, industry and system. Let no guilty worm escape.

For burns or scalds nothing is more soothing than the white of an egg, which may be poured over the wound. It is softer as a varnish for a burn than collodion and being always at hand can be applied immediately. It is also more cooling than the "sweet oil cotton" which was formerly supposed to be the surest application to allay the smarting pain. It is the contact with air which gives the extreme discomfort experienced from ordinary accidents of this kind, and anything which excludes the air and prevents inflammation is the thing at once to be applied.

A standing antidote for poison by dew, poison oak, ivy, etc., is to take a handful of quicklime, dissolve in water, let it stand half an hour, then paint the poisoned parts with it. Three or four applications will never fail to cure the most aggravated case.

NOSE BLEEDING.—A famous English physician recommends to a patient the following remedy, which has been uniformly found to be effectual: A dose composed of fifteen drops of elixir of vitriol in a wine-glassful of water. The moment that this dose was swallowed, the hemorrhage ceased.

A peculiarity of the Hawkins family, of Waxahatchie, Texas, is that the members are born with five fingers on each hand, the joints and nails on these superfluous members being perfect. The fifth finger is attached to the hand near the little finger by muscular tissue alone, and is easily removed by a skillful surgeon.

Baked Indian Pudding.—Boil a pint of sweet milk; while boiling stir in a large teaspoonful of meal; cool a little, add 3 eggs well beaten, 1 pint of cold milk, tablespoonful of flour, ½ cup of sugar, ½ cup of molasses, teaspoonful of ginger, 1 of cinnamon; salt—Bake 1½ hour.

BRIGHT'S DISEASE AND ICE WATER.—London Medical Journal: The idea has recently been advanced that Bright's disease is attributable to the immoderate use of ice water and cold drinks, the fact being cited that the people of this country use ninety per cent. more in their drinks than the people of any other country—the inhabitants of Greenland not excepted—and that we have seventy-five per cent. more of Bright's disease. The wine-drinking countries of Europe are said to be comparatively free from the malady, while in America the progress of the disease, it is asserted, has kept pace with the increased consumption of ice.

Calling on the Sick.

1. Only call at the door, unless you are sure your friend is able to see you without harm.
2. Enter and leave the house, and move about the room quietly.
3. Carry a cheerful face, and speak cheerful words.
4. In order to cheer you need not tell lies.
5. If your friend is very sick, do not fall into gay and careless talk in the attempt to be cheerful.
6. Don't ask questions, and thus oblige your friend to talk.
7. Talk about something outside, and not about the disease and circumstances of the patient.
8. Tell the news, but not the list of the sick and dying.
9. If possible carry something with you to please the eye and relieve the monotony of the sick room; a flower, or even a picture which you can loan for a few days.
10. If desirable, some little delicacy to tempt will be well bestowed.
11. The perfume of some flowers is poisonous, and they should never be carried into the sick room. Especially is this true of the tuberose, heliotrope, hyacinth, orange, lilac, syringa and lilies.

Stay only a moment, or a few minutes at the longest, unless you can be of some help.

Useful Hints for Measuring Land.

Almost every farmer has some way of measuring land, and the most common is to step off five paces for a rod, and call sixty by sixty-five paces an acre. For ordinary purposes this mode will answer, but when the exact measurement of a piece of land is desired, it cannot be depended upon as being accurate.

A light pole just eleven and a half feet long is a cheap and convenient measure, but a four-rod tape line is much better.

An exact acre can be found by the following table of distances:

- A plot of ground 5 yards wide by 984 yards long contains one acre.
- A plot of ground 10 yards wide by 484 yards long contains one acre.
- A plot of ground 40 yards wide by 121 yards long contains one acre.
- A plot of ground 80 yards wide by 60½ yards long contains one acre.
- A plot of ground 70 yards wide by 69 1/7 yards long contains one acre.
- A plot of ground 220 feet long by 198 feet wide contains one acre.
- A plot of ground 440 feet long by 99 feet wide contains one acre.
- A plot of ground 110 feet wide by 396 feet long contains one acre.
- A plot of ground 240 feet long by 181 1/2 feet wide contains one acre.
- One acre contains 160 square rods, 4840 square yards, or 43,560 square feet.
- One rod contains 40 square paces, 672.25 square feet.

To measure corn in the crib: Multiply the length, breadth and height together, in feet, to obtain the cubic feet; multiply this product by four and strike off the right figure, and the result will be the bushels, nearly.

The Day Kidney Pad is by far the best remedy for diseases of the kidneys and urinary organs \$2, of all druggists. Children's cures bedwetting \$1.50.

Some of the leading manufacturers of tobacco have increased prices for their goods. They give as a reason, increased cost of the raw material.

The Markets.

St. Louis, July 13th, 1881.
[Prices hereafter are for round lots in first hands. Small order lots charged at higher prices. Buyers pay first ten days' storage, except in special bins.]

Flour.—Sales: 31 bbls at \$3.35, 12 at \$4.35, 200 at \$4.25, 225 bbls at \$4.50, 46 at \$5.50, 129 at \$5.90, 444 at \$6.30, 140 at \$6.50.

Rye Flour.—On orders at \$2.65 to \$2.70 del.

Barley.—Sales: Sacked—2 cars at mills at \$4.60, 126 ahs on levee at 65c, 1 car E track at 68c.

Wheat.—No. 2 red at \$1.17, No. 3 at \$1.12, No. 4 at \$1.07. Mediterranean, this side—21 cars No. 2 at \$1.17, No. 3 at \$1.11. Rejected had a bid of 95c.

Corn.—No. 2 mixed at 46c, No. 2 white-mixed at 49c, rejected white-mixed at 45c. Rye—No. 2 sold at 98c, and more offered at same.

Barley.—New fall at 70c.

Oats.—No. 2 at 41c, rejected at 42c. New sacks, this side—18 at 43c, 232 good mixed at 44c, 232 prime at 55c, 100 choice at 45c.

Hay.—Receipts and offerings large, and market dull. Sales: On E. trk—1 car prime mixed at \$1.1, 2 prime timothy at \$1.60, 1 strictly prime at \$1.50, 2 choice at \$1.4; 15; this side—4 cars choice new prairie at \$8.50, 1 prime timothy at \$1.2, 1 clover at \$1.50.

Hemp.—Undressed \$95@110, dressed \$145@155, shorts \$115@125, hauled tow \$50@55.

Baling Stuffs.—Jobbing rates bagging—2-lb tote 10@11c, flax and flax-mixed 10c. Hemp twine 14@15c.

Highwines.—Steady and firm at \$1.08.

Lead.—Soft Missouri at \$4.50.

Butter.—Trade light. Creamery at 22@24c and occasionally 25c in small quantities, choice dairy at 19@20c, medium at 14@16c, low at 9@11c, near-by country make at 8@9c for common to 10@12c for sweet.

Cheese.—Full cream at 9@10c, prime part skim at 5½@6½c, poorer grades at 1½@4c.

Eggs.—At 4@6c for a. c. and 8c for candled.

Liver Poultry.—We quote: Old hens \$3.50@3.60, mixed \$3@3.25, cocks \$3.00; young—small \$1.25@1.50, medium \$1.75@2, good to choice \$2.25@2.50, fancy large \$2.75; ducks \$1.75@2 for young, \$1.50@1.75 for old; turkeys at \$6@8.

New Potatoes.—Home-grown mainly at 75@85c per bu; consigned lots at \$1.75@2 per bu.

Onions.—Small lots sold at \$1.70@1.75 per bu.

Tomatoes.—Market lower by large receipts of home-grown; demand good, however. Consignments ranged at 25c per ½-bu box; home-grown at 60@80 per bu.

New Apples.—Boxed lots at 25c to 50c per ½-bu box as in quality. Home-grown shipping fruit at \$2.50@3 per bu packed.

Peaches.—Hale's early at 50@75 per ½-bu box, Crawford at \$1.50@1.75, Mobile choice at \$2.10.

Plums.—Consigned lots sold at 40@50c ½-bu box, \$1.75@2.25 ½-bu case for wild goose, and 25c to 40c ½-bu box for Chickasaw. Home-grown Chickasaw at \$1.25 ½-bu.

Watermelons.—Selling \$10@12 per 100 in car lots.

Blackberries.—Cultivated at \$5@6 ½-gallon case, wild at \$2, home-grown at \$1.25 ½-gallon case. Home-grown in good demand at 25c to 35c per doz.

White Beans.—Western at \$1.25@1.50, prime clean \$1.75@2, and trashy, badly stained, weevily, etc., 50c@\$1. Eastern from store at \$2.40@2.50.

Cabbages.—Sells at \$2.75@3.00 per crate in shipping order.

Honey.—Quiet. New quotable at 7@8c for strained—25 large pcks sold at 8c, and extracted in cans at 9@10c. No market for comb as yet.

Maple Sugar and Syrup.—Sugar: Dark and soft 8c, bright 10c, pure Vermont 12@12½c. Syrup quotable at 75@90c ½ gal.

Grass Seeds.—New timothy was received and sold yesterday for the first time this season—46 sbs unclean (from this state) at \$2.15; 18 sbs trashy Hungarian at 60c; Hungarian 75@85c; Missouri millet at \$1.10@1.25; German millet at \$1.75@2; timothy 2.15 July to \$2.25 August and \$1.85 Sept. Orders higher.

Flaxseed.—Dull and lower to sell; spot offered and untaken at \$1.10 pure test. Offerings undesirable.

Hemp Seed.—In fair demand at \$1.10 without, \$1.15 with aka.

Castor Beans.—Quiet, nominal at \$1.30 for prime.

Salt.—Domestic sells at \$1.40@1.45 per bbl; G. A. at \$1.20@1.25 per sack.

Horn.—N. Y. 1880 crop 23c@25c from store.

Wool.—Walter Brown & Co., 152 Federal street, Boston, quote: Missouri—Fine at \$4.25@4.50, medium at 28@32c. Kansas—Good fine at 24@27c, ordinary fine at 21@24c, good medium at 27@30c, ordinary medium at 25@27c. Coarse unwashed at 22@25c. Sales 570,900 lbs, of which 502,700 lbs fine, 68,200 lbs medium and below.

Wool.—Unchanged, although there was some little improvement to demand. We quote: Tub-washed—choice 39@40c, dingy and low at 31@35c; unwashed—clear bright medium 23½@24c, fair do 22@23c, low and coarse 18@21c, light fine 17@20c, heavy do 13@16c. Black, cotton, burry, and lots containing ducklocks, range from 3@10c per lb less than fleeces in good condition; southern burry 11@12½c; for each wool sack, 3½ lbs tare deducted and 25c allowed. Sales: Unwashed—3 sbs burry at 18½c, 15 dark Kansas at 19½c, 6 burry and fine at 20c, 9 at 22½c, 24 and 16 Kansas medium at 23c, 4 Texans at 24½c; Tub washed 5 sbs at 38½c, 8 at 39c.

Hides.—Dull and weak; offerings running poor in quality. Dry flint 16@16½c—damaged 13@13½c; dry salt 12½c—damaged 13½c; dry bull and stag 10½c; green salt 9c—damaged 7½c; green unwashed 7½c—damaged 6½c; green bull and stag 5½@6c. Glue stock at 5c green to 6c dry.

Feathers.—Selling fairly. Prime L. G. at 57c in large to 58c in small sacks; unripe do 50@54c; old and mixed range from 10c to 40c; tare 3c@10c per cent.

Sheep Pelts.—Green: Large \$1.20@1.40; medium 85c@\$1; lamb 30@40c; dry 40c to \$1; shearing—dry 15@25c; green 30@40c.

Deer Skins.—Bug-eaten, salted and damaged at 25c to 30c; No 1 at 40c.

Cattle.—Export steers \$6.00@6.15, good to heavy steers \$5.50@5.90, medium to fair steers \$5.00@5.40, fair to good Colorado steers \$4.75@5.50, fair to good stockers \$3.75@4.25, fair to good feeders, 1,000 to 1,100 lbs. \$4.75@5.10, native cows, common to choice \$2.00@3.50, native heifers, fair to choice \$2.25@3.70, common to choice native cows \$3.00@4.00, good to choice horned Texas steers \$4.25@5.20, medium to fair conf-fed Texas steers \$3.50@4.00, inferior to common mixed \$3.00@3.45, common to good grass Texans \$2.50@3.75, milk cows with calves \$18.00@42.00, veal calves \$4.00@9.00.

Hogs.—Light shipping, 120 to 130 lbs, \$5.40@5.75; rough ends \$5.25@5.75; Yorkers \$6.00@6.20; fair to good heavy packing \$6.00@6.30; fair to choice heavy \$6.40@6.50.

Sheep.—Common to medium muttons \$2.50@3.25; fair to good muttons \$3.50@4.00; good to choice muttons \$4.10@4.60; stock sheep \$2.25@2.85; lambs per head \$1.50@3.00; Texas sheep \$2.00@4.00.

RESTORED FROM A DECLINE.

NORTH GREECE, N. Y., April 25, 1880.
Dr. R. V. Pierce, Buffalo, N. Y.: Dear Sir—I feel it my duty to write and thank you for what your "Golden Medical Discovery" and "Favorite Prescription" have done for my daughter. It is now five weeks since she began their use, and she is now healthy, has more color in her face, no headache, and is in other ways greatly improved.

Yours truly, Mrs. MARELLA MYERS.

Pastures are benefited by being cropped by sheep. They not only keep down the weeds, but have more fertilizing materials in their droppings than do cows.

Because it adds to personal beauty by restoring color and lustre to gray or faded hair, and is beneficial to the scalp, is why Parker's Hair Balsam is such a popular dressing.

This beautiful clock, an ornament to any room in cottage or mansion, is given as a premium to any one who sends us twelve new subscribers for one year. We have sent out hundreds of them for premiums; some of which have been running for several years, and all keep accurate time, and give unbounded satisfaction. Every one who reads this can get up the club and get this excellent clock free.

Desperate Cases.

Many cases which come to us for treatment by Compound Oxygen are of a class which no physician of any school would undertake to cure. They are, in fact, such as have run the gauntlet of experiment within the regular schools of medicine, and of quackery without, until between disease and drugs the patient is reduced to the saddest and most deplorable condition, and one for which relief seems impossible. No curative treatment can be subjected to a severer test than is offered by these cases. And yet, in many of these, the most brilliant results have followed the use of Compound Oxygen. A Treatise on Compound Oxygen, which is mailed free, Dr. STARKER & PALEN, 1109 and 1111 Girard Street, Philadelphia, Pa.

Over 165,000 Howe Scales have been sold. Send for catalogue to Borden, Sellick & Co., general agents, St. Louis, Mo.

THE BEST OF ALL LINIMENTS FOR MAN AND BEAST.

For more than a third of a century the Mexican Mustang Liniment has been known to millions all over the world as the only safe reliance for the relief of accidents and pain. It is a medicine above price and praise—the best of its kind. For every form of external pain the

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Liniment is needed by somebody in every house. Every day brings news of the agony of an awful scald or burn, subduing of rheumatic martyrs restored, or of a lame horse or ox saved by the healing power of this

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which speedily cures such ailments of the HUMAN FLESH as: Rheumatism, Swellings, Stiff Joints, Contracted Muscles, Burns and Scalds, Cuts, Bruises and Sprains, Pains in Bites and Stings, Stiffness, Lameness, Old Sores, Ulcers, Frostbites, Chills, Sore Nipples, Caked Breast, and indeed every form of external disease. It heals without scars.

For the BRUTE CREATION it cures: Sprains, Swellings, Stiff Joints, Rheumatism, Hoof Diseases, Foot Rot, Scow Worm, Scab, Hollow Horn, Scatches, Wind-galls, Spavin, Thrush, Ringbone, Old Sores, Fall Evil, Film upon the Sight and every other ailment to which the occupants of the Stable and Stock Yard are liable. The Mexican Mustang Liniment always cures and never disappoints; and it is, positively,

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